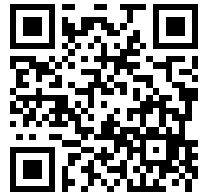

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STATE OF BRUNEI
ANNUAL REPORT

1971

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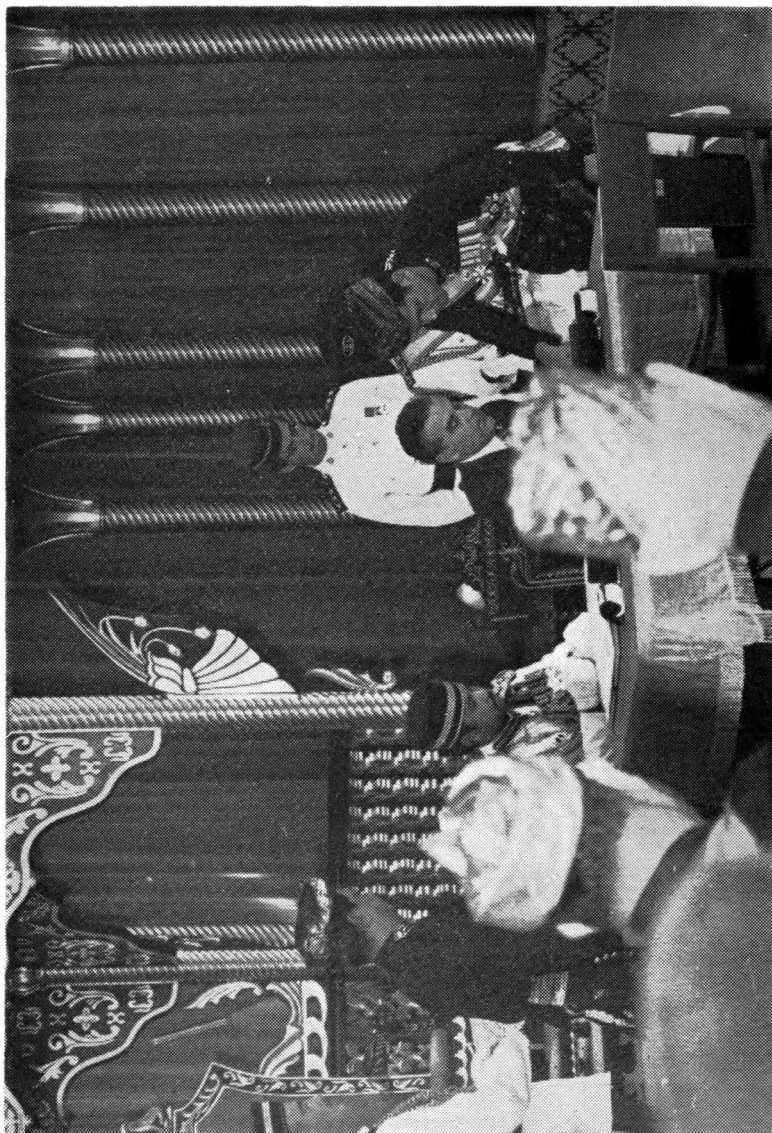
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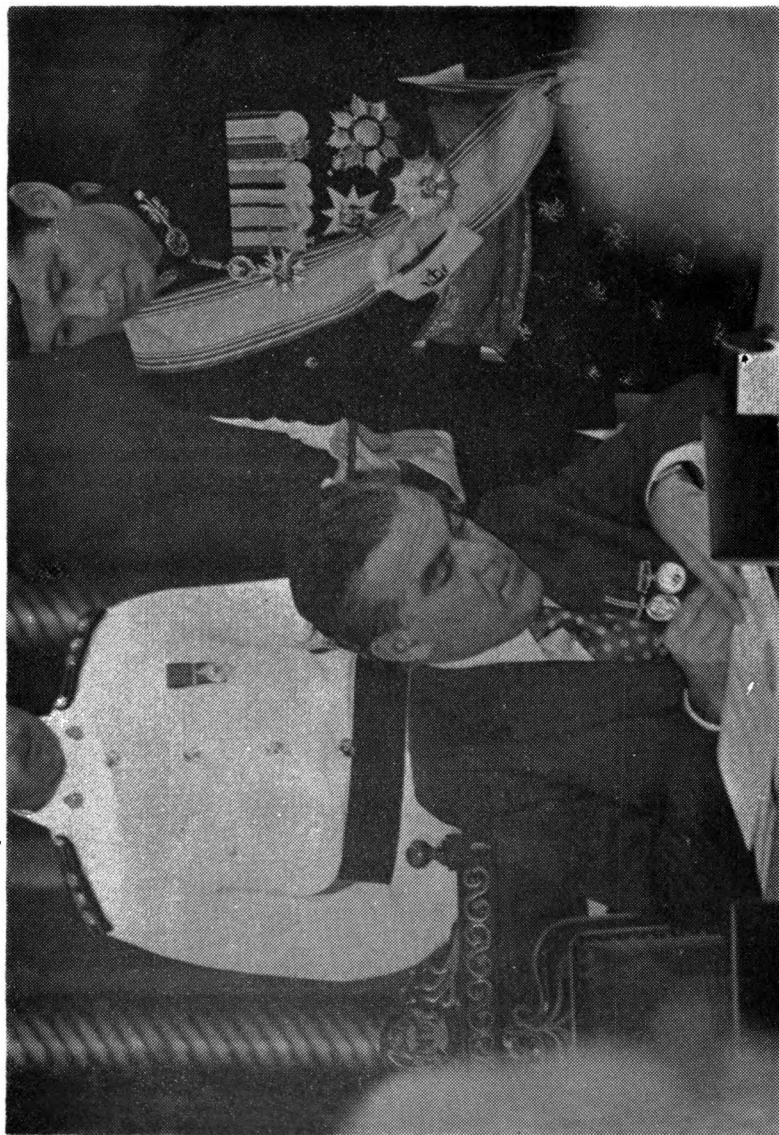
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The Signing Ceremony of the New Agreement by His Highness the Sultan and Yang
Di-Pertuan, and Mr. Anthony Royle on 23rd November, 1971.



His Highness Sir Hassan Boliah Mu'izzaddin Waddaulah Ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda Omar Ali Saifuddin Sa'adul Khairi Waddin, Sultan and Yang Di-Pertuan Negeri Brunei Darul Salam, D.K., D.P.K.G., D.P.K.T., P.S.N.B., P.S.L.J., S.P.M.B., P.A.N.B., C.M.G., D.K. (Kelantan), D.K. (Johore) signing.



Mr. Anthony Henry Fanshawe Royle, M.P., Parliamentary Under Secretary of State for Foreign and Commonwealth Affairs signing.

AMONG THOSE

WHO SIGNED

THE NEW

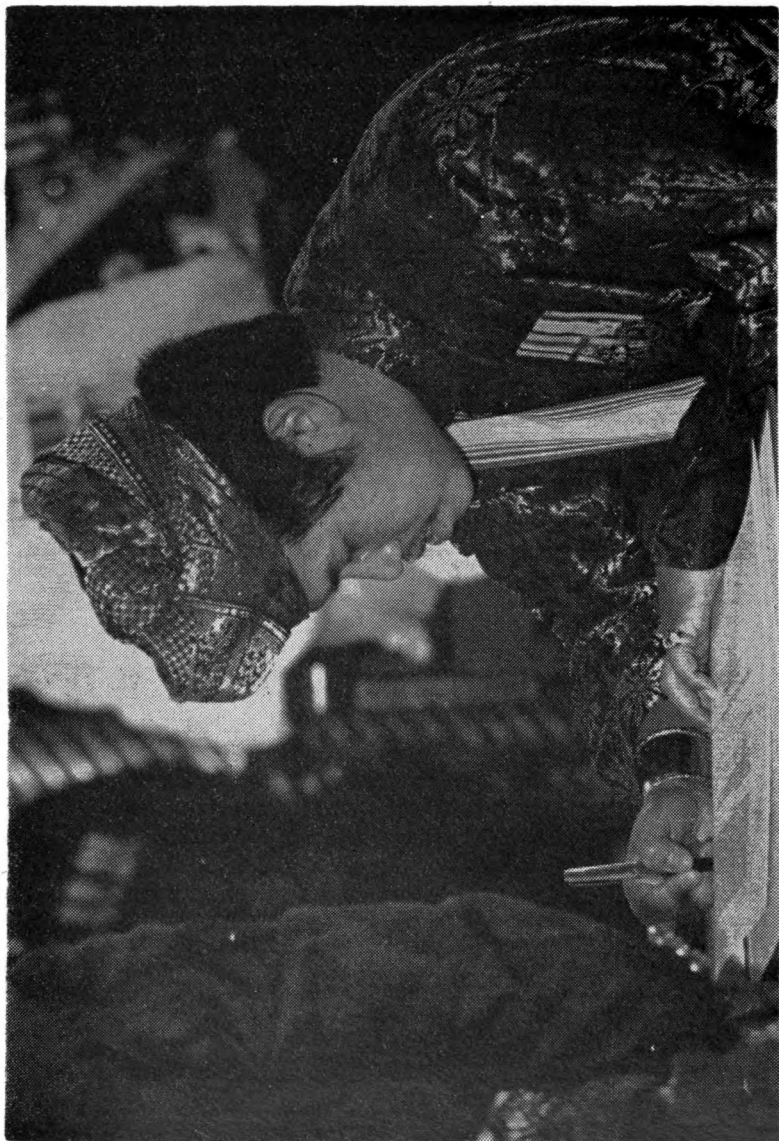
AGREEMENT



Mr. A.R. Adair, C.V.O., M.B.E., High Commissioner for the United Kingdom of Great Britain and Northern Ireland.



**Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda Omar 'Ali Saifuddin
Ibni Al-Marhum Sultan Muhammad Jamalul 'Alam, D.K., K.C.M.G., P.H.B.S.**



Yang Teramat Mulia Seri Paduka Duli Pengiran Perdana Wazir Sahibol Himmah
Wal-Waqar Muda Mohamed Bolkiah Ibni Duli Yang Teramat Mulia Paduka Seri
Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., P.H.B.S.



The Most Honourable Pehin Orang Kaya Laila Setia Bakti Di-Raja, Dato Utama Awang Isa bin Pehin Dato Seri Utama Awang Haji Ibrahim, D.K., S.P.M.B., D.S.N.B., O.B.E., P.H.B.S., General Adviser to His Highness the Sultan.

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CHAPTER 1

GENERAL REVIEW OF THE YEAR 1971

ON 23rd November, 1971 His Highness Sir Hassanal Bolkiah Mu'izzaddin Waddaulah Ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda Omar Ali Saifuddin Sa'adul Khairi Waddin, Sultan and Yang Di-Pertuan, Negeri Brunei Darul Salam, D.K., D.P.K.G., D.P.K.T., P.S.P.N.B., P.S.N.B., P.S.L.J., S.P.M.B., P.A.N.B., C.M.G., D.K. (Kelantan), D.K. (Johore) signed the Agreement between Britain and Brunei, which amended the previous Agreement signed in 1959. Mr. Anthony Henry Fanshawe Royle, M.P., Parliamentary Under Secretary of State for Foreign and Commonwealth Affairs signed the Agreement for Her Majesty's Government.

With the advent of the amended Agreement Britain ceased responsible for Brunei's internal affairs but will continue to be responsible for Brunei's external affairs which shall be channelled diplomatically through the High Commissioner in Brunei. Her Majesty's Government and His Highness' Government will consult each other regarding measures to be taken either separately or jointly should Brunei be threatened by external aggression.

Although the burden shouldered by Her Majesty's Government is now somewhat reduced, the bond of friendship between the two countries, ever close and strong will further be strengthened and enhanced due to mutual respect for each other's rights and better understanding of each other's problems. The signing of this agreement is a further proof of the two governments' respect for the conditions of the 1959 Agreement and reflected the developments since without in any way reducing the quality of this special relationship.

Population Census

Unlike previous population censuses, the 1971 census was conducted wholly for Brunei by a central office at the Economic and Statistics Section of the State Secretariat. Previously the census used to be conducted as part of the census of the Straits Settlement or Borneo.

According to the census results the population on the census date of 10th August, 1971 was 136,256. The male population under 15 years of age was 30,073 and 15 years and over 42,699 while the female population of the same distribution

GENERAL REVIEW OF THE YEAR 1971

were 29,016 and 34,468 respectively. About 50% of the total working age were economically active. The total number of Malays and other indigenous was 97,819; Chinese 31,925; Indians 2,162; and other races 4,350.

Other Events

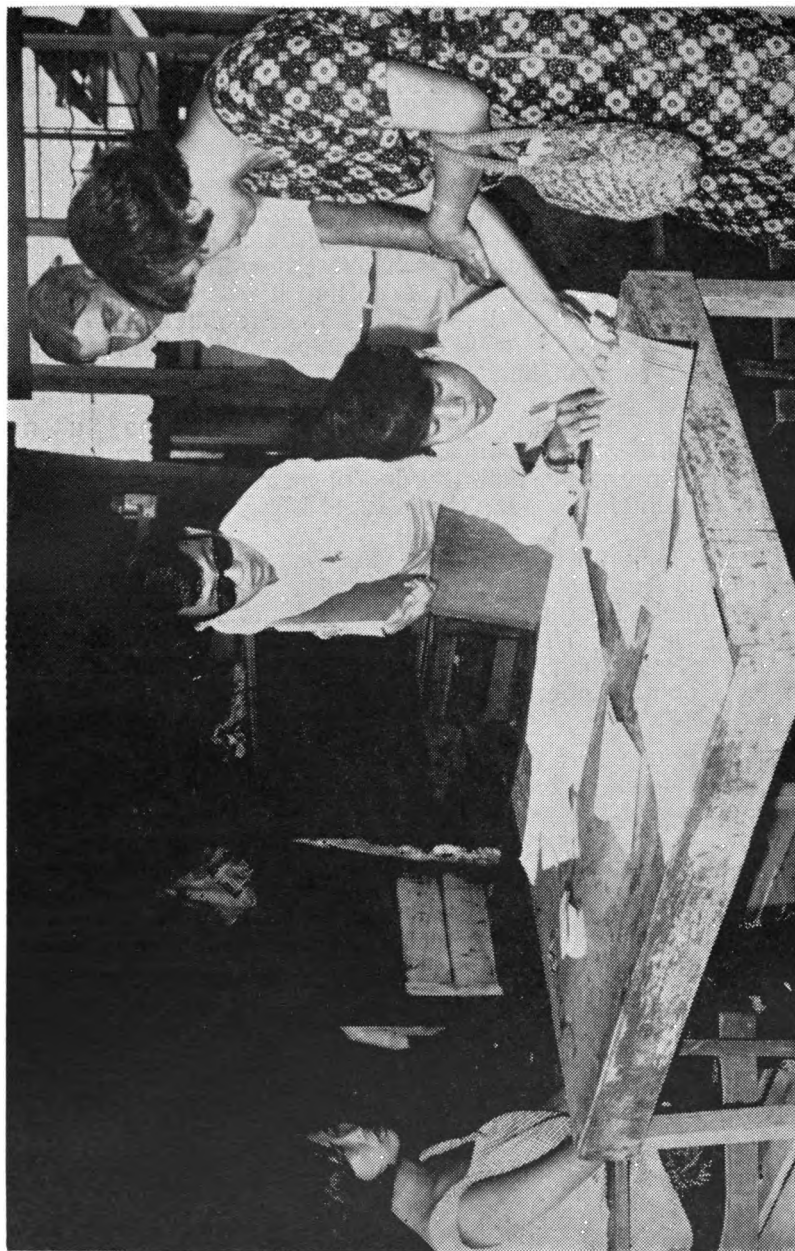
On the 10th anniversary of the Royal Brunei Malay Regiment, His Highness presented the regiment with a new Sultan's colours. The ceremony was very spectacular in that it was the first of its kind ever to be staged in Brunei. The former regimental colours is now known as the Colonel-in-Chief's colours, after their donor, The Duli Yang Teramat Mulia Paduka Seri Begawan.

On another occasion during the same year the Sultan presented the Royal Standard to the Royal Brunei Police Force. The force had borne the main burden of maintaining security in the state, for which the people of Brunei is rightly grateful.

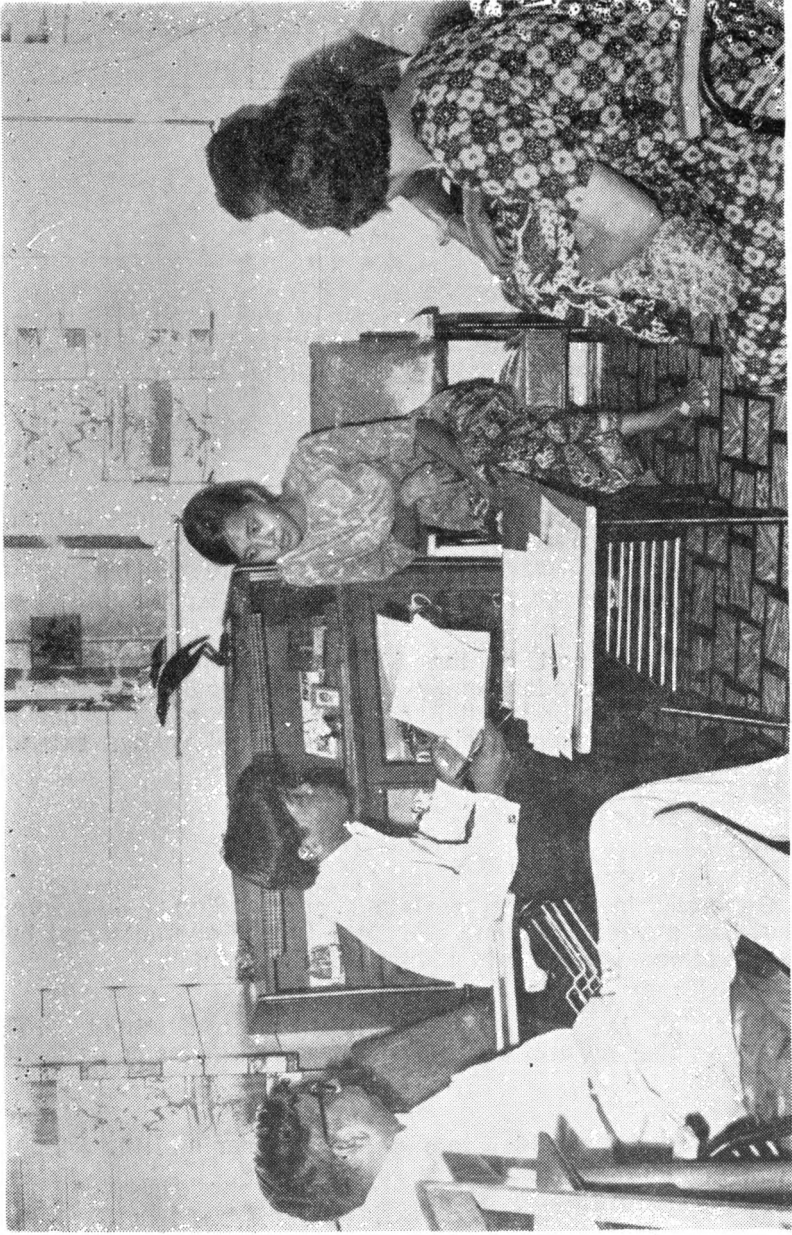
Another colourful event for the year was the Royal marriage between Yang Teramat Mulia Duli Pengiran Muda Sufri Bolkiah and Yang Mulia Pengiran Anak Salmah binte Pengiran Muda Mohammad Salleh. The ceremony adhered to the full Brunei tradition of a Royal marriage, a pageantry show rich and colourful reflecting a culture inherited from times past.

Infrastructure

Significant progress continues to be made in the establishment of a state-wide infrastructure of public services. During 1971 work has steadily continued on a road programme, sewerage system and major water supplies. Significant expansions of the electricity and telecommunication system have also been made. The new deep sea port at Muara and the new international airport at Bandar Seri Begawan are progressing towards completion.



The Census Superintendent checking the work of an enumerator. In the background are the U.N. Census Adviser and an Assistant Superintendent watching with interest.



A lady member of a household ready to reply to the question put forward by a census enumerator.

CHAPTER 2

PHYSICAL FEATURES

Brunei is situated on the north-west of the island of Borneo, between east longitudes $114^{\circ} 23'$ and $115^{\circ} 23'$ and between north latitudes 4° and $5^{\circ} 5'$ covering a total area of 2,226 sq. miles. It has a common border with Sarawak, one of the two eastern states of Malaysia, which also divides Brunei into two parts.

The western part of Brunei State, comprising Muara/Brunei, Tutong and Belait districts, consists predominantly of hilly lowland below 300 feet, but rising to over 1,000 feet in places on the Sarawak border.

The eastern part of the State, comprising Temburong District, consists predominantly of rugged mountains terrain, rising to 6,070 feet on Bukit Pagon. Near the coast, it has a wide, tidal and swampy plain. Narrow alluvial valleys extend up the main rivers.

Climate:

Generally in common with our surrounding neighbours, Brunei has a tropical raining climate. This is characterised by constant temperature and humidity and high rainfall.

Rainfall in Brunei normally ranges from about 110" annually in the lowland areas to over 150" in many parts of the interior.

Temperatures are high throughout the year and the annual extreme range of temperature is 73°F to 89°F .

Relative humidity is high, an average fluctuation between 67% to 91% throughout the year.

PHYSICAL FEATURES

Topography:

The land surface is developed on bedrock of Tertiary age, comprising sandstones, shales and clays. Several factors have influenced the moulding of this surface into its present form, namely the comparatively youthful state of the present cycle of geological erosion, the nature and angle of dip of the strata and the climate factors of high rainfall and the temperatures that maintain a dense forest cover on all land-forms and induce deep chemical weathering and rapid erosion. These have contributed to produce a strong undulating ridge and valley terrain with universally steep slopes. Erosion occurs even under a forest canopy, but the rate is considerably accelerated when the forest is cleared. The sediments washed off the hills are re-distributed by rivers and floods to form the extensive alluvial plain near the coast.

Most of the soils in Brunei are relatively young. The main process of soil formation is one of continuous downward leaching of the products of weathering producing a soil in which the upper layers are depleted of these products and the lower layers enriched.

Vegetation:

There is a general correlation between soils and types of vegetation. The forests of Brunei cover 1,678 sq. miles, or 75% of the total area of the State. Mangrove forests are found at sea level: Heath Forests are found on sandy alluvial soils usually below 100 feet above the sea level but occasionally also on high altitude sand-stone ridges in Ulu Temburong; Peat Swamp Forests are along the lower reaches of the main river but separated by mangrove and Heath Forests from the sea; Mixed Dipterocarp Forests are immediately above the Peat Swampy Forests and extending up to about 4,200 feet above sea level; and Montane Forests cover about 4,200 feet and are found only in the south east of Ulu Temburong.

Water Resources:

Although rainfall is high, water resources are difficult to develop. Water in the main rivers is brackish for many miles upstream and the catchment of most streams in the coastal zone is inadequate for major supply schemes. Exploitable ground water is scarce because the impermeability of both alluvial and bedrock strata restricts supplies from this source.

PHYSICAL FEATURES

Minerals:

Oil, found in Seria is the most important mineral and it provides almost all of Brunei's wealth. Oil explorations are continuously undertaken in other part of the State by several over-seas oil companies. Offshore discoveries have significantly increased the oil output supplementing decreasing land output.

Quantity and quality of other minerals, coal, limestone, silica sand and gravel, have been investigated but with the exception of silica sands economic utilization of these minerals is doubtful at the present time, though gravel is mined on a supplementary scale.

CHAPTER 3

POPULATION OF THE STATE OF BRUNEI

THE Director of Medical Services is ex-officio, the Registrar of Births and Deaths. The Central Registry is located at Headquarters of the Medical & Health Department and is under the control of a Permanent Deputy Registrar. A number of part-time Deputy Registrars receive notification of births and deaths throughout the State.

Statistics of Emigrants from, and of Immigrants into the State are regularly provided by the Controller of Immigration, through the Statistical Department of the State Secretariat.

The great event in 1971 was the holding of a State-wide census in August. This has elucidated the population position. In recent years, figures have been largely speculative. The last census was held in 1960. We now have two definite figures for comparison.

The population in August, 1960, by census was 83,877. The population in August, 1971, by census was 136,256, an increase of 52,379 in 11 years.

From these figures one gets an "average" increase of 4,761. The increase will, however, have fluctuated irregularly during the recent years of active structural development calling for much immigrant labour.

The number of births registered in 1971 was 5,181 giving a crude birth rate of 38.01. The deaths registered in 1971 were 801 with a crude death rate of 5.88.

The "natural" increase in population in 1971 was, therefore, 4,380. This figure is the indicator of the rate of increase of the basic stable population of Brunei, well shown by the following table, which is not speculative but derived from numbers of registered births and deaths.

POPULATION OF THE STATE OF BRUNEI

NATURAL GAINS IN POPULATION

	1971	1970	1969	1968	1960
Natural Gains	4,380	4,101	3,923	4,197	3,188
Population	136,256	—	—	—	83,877

The following tables are very informative giving the distribution of population by racial origin, sex and residence:—

RACIAL DISTRIBUTION

Districts	Total	Malay	Other Indig.	Chinese	Indians	Other Races
Brunei/Muara	72,791	55,538	1,668	13,464	1,047	1,074
Belait	42,383	17,238	4,564	16,552	999	3,030
Tutong	15,858	13,082	998	1,517	44	217
Temburong	5,224	3,410	1,322	392	72	28
Total	136,256	89,268	8,552	31,925	2,162	4,349

DISTRIBUTION BY SEX

Districts	Total	Percentage	Males	Females
Brunei/Muara	72,791	53.42	37,995	34,796
Belait	42,383	31.11	23,770	18,613
Tutong	15,858	11.64	8,220	7,638
Temburong	5,224	3.83	2,787	2,437
Total	136,256	100.00	72,772	63,484

It is also of interest to observe the main religious groups in the State of Brunei.

POPULATION OF THE STATE OF BRUNEI

RELIGIOUS GROUPS

Total	Muslim	Christian	Bahai	Buddhist	Others	Unknown
136,256	84,700	10,425	510	18,373	18,102	4,146

In view of the undependable population figures for the intervening years between 1960 and 1971 these years of the two definitive counts are the only ones that can be used for comparative studies based on total populations.

TABLE I

Year	Population	% Increase since 1960	No. of Births	Birth Rate
1960	83,877	—	4,105	48.9
1971	136,256	62.45	5,181	38.02

Year	No. of Deaths	Death Rate	Infant Deaths under 1 year	Infant Mortality Rate
1960	917	11.10	284	69.18
1971	801	9.10	199	38.40

TABLE II

VITAL STATISTICS, STATE OF BRUNEI BY DISTRICT, 1971

	Brunel	Temb.	Tutong	Belait	Total
Population by Census, August, 1971	72,791	5,224	15,858	42,383	136,256
Percent	53.42	3.83	11.64	31.11	100.00
Live-births	2,999	239	555	1,388	5,181
Birth rate/1000	41.20	45.75	34.98	32.76	38.01
Infant Deaths	132	15	20	32	199

POPULATION OF THE STATE OF BRUNEI

Infant					
mortality rate/1000	44.01	62.76	36.03	23.04	38.40
Total Deaths	470	41	94	196	801
Death rate/1000	6.45	7.85	5.93	4.69	5.88
Delivery by midwives	1,704	85	269	350	2,408
Hospital deliveries					
(Including B.S.P. Hosp.)	983	—	—	872	1,855

Note: B.S.P.: British Shell Petroleum.

TABLE III

	Total Deaths Female	— 370	: 45.69%
Total Death: 801			
	Total Deaths Male	— 431	: 54.31%

CHAPTER 4

EMPLOYMENT

Industrial Structure

THE statistics in Table I of Appendix II concerning the wage-earning population and the numbers and sizes of places of employment in Brunei show how the industrial structure consists almost entirely of small-scale enterprises. Out of 964 establishments submitting returns to the Labour Department, ninety per cent have less than 25 employees. The structure is largely dominated by the Government and the oil industry, the latter accounting for over ninety per cent of the value of the State's exports. Outside the oilfield the Government is itself the principal supplier of essential community services, such as medical and health, welfare, municipal services, public utilities and education. Next in order of size are the construction, service and distributive industries, which have been stimulated by an extensive development programme of public works over the last few years and by the demands of a growing and prosperous population for goods and services. The farming and fishing industries are operated mainly by individuals or small groups, usually self-employed with occasional hired help. A small logging and sawmilling industry operates under annual licences for the production of timber for local use. Finally there are a variety of very small manufacturing and processing establishments producing furniture, bricks, aerated waters and other articles for consumption locally.

The Labour Department

The Labour Department maintains a headquarter's office in Bandar Seri Begawan and a branch office in Kuala Belait, some 67 miles distant at the other end of the State. It has an authorised establishment of a Commissioner, an Adviser, eight executive officers and ten clerical officers, but two of the executive posts and one clerical post remained vacant throughout the year. The estimated and actual expenditure of the Department for the year under review was:—

EMPLOYMENT

	Estimated \$	Actual \$
Personal Emoluments —		
Commissioner, Adviser and Executive Staff	109,260	98,100
Clerical Staff	<u>51,135</u>	<u>44,946</u>
	160,395	143,046
Other Charges —		
Transport and Travelling	18,000	13,353
Other Recurrent Charges	4,850	3,799
Special Expenditure	<u>11,000</u>	<u>9,002</u>
	<u>33,850</u>	<u>26,155</u>
Total Expenditure	<u>194,245</u>	<u>169,201</u>

Legislation

The principal legislation affecting employment consists of the Labour Enactment (No. 11 of 1954 amended by Nos. 6 and 18 of 1957 and No. 15 of 1961), the Workmen's Compensation Enactment (No. 5 of 1957 amended by No. 7 of 1964) and the Trade Unions and Trade Disputes Enactments (Nos. 5 and 6 of 1961). No new Enactments were passed during the year under review but subsidiary Rules were made under the Labour Enactment affecting the employment of lodging and catering services workers and the employment of labour on public contracts. The Labour (Domestic Servants) Rules (G.N.S. 79 of 1971) have replaced similar Rules made in 1955 to apply certain of the provisions of the Labour Enactment to domestic servants employed in private houses as well as in hotels, restaurants, clubs and other institutions. They have extended the protection afforded to this class of worker in regard to terms of engagement, repatriation of immigrants, protection of wages and conditions of employment generally. The Labour (Public Contractors) Rules (G.N.S. 80 of 1971) have been made for the purpose of giving effect to Convention 94 concerning Labour Clauses in Public Contracts. They apply to all Government contracts for works, supplies and services where the value of the contract exceeds \$10,000, but not as yet to contracts entered into by other public authorities.

EMPLOYMENT

International Labour Conventions

A statement of the application to Brunei of the International Labour Conventions ratified by the United Kingdom Government is given in Appendix I.

Employment

It has been ascertained from the 1971 census that some 40,000 persons in the State are economically active. This represents rather less than a third of the total population and 52.15 per cent (79.36% male and 18.75% female) of the population over the age of 15 years. Industrial distribution and sex of the economically active is as follows:—

	P	M	F
Agriculture, Forestry and Fishing	4,781	3,298	1,483
Production of Oil and Natural Gas	2,827	2,633	194
Sawmilling and Timber Processing	575	565	10
Other Mining, Quarrying and Manufacturing Industries	1,267	951	316
Building and Construction	8,108	7,947	161
Electricity and Water Supplies	1,086	1,061	25
Hotels, Restaurants and Commerce	4,195	3,338	857
Transport, Storage and Communications	2,130	2,037	93
Public Administration, Defence and Municipal Services	7,344	6,870	474
Social Services	4,091	2,399	1,692
Other Community, Business and Repair Services	2,076	1,876	200
Personal and Household Services	1,505	571	934
Not adequately defined	70	51	19
Total economically active	40,055	33,597	6,458

Particulars of occupational status (employers, employees and self-employed or family workers) are not yet known. But from

EMPLOYMENT

the information available to the Labour Department there were 16,337 salary and wage earners employed in the State on the 31st October, 1971. Details of industrial and occupational distribution, sex age group and residential status are contained in Appendix II. The figures however omit a small minority of employers who failed to submit returns or whose returns did not arrive in time to be tabulated. They also exclude all Government employees in established posts and non-established employees in some Departments.

Migrants

It will be apparent from a study of Appendix II that Brunei is very much dependent on migrants, both skilled and unskilled, for the manpower needed to support her economy. This applies particularly to construction, but other industries too employ substantial numbers of migrants. Their employment is controlled by means of employment passes, which are issued by the Controller of Immigration upon the advice of the Commissioner of Labour that the requirements of the Labour Enactment have been complied with and that the entry of the migrant will not adversely affect the local employment market. The same principle is followed in regard to the entry of professional, clerical and sales workers whose conditions of employment are not governed by the Labour Enactment.

Roughly half the migrants working in the State during 1971 were from East Malaysia. They included both skilled and unskilled persons, the latter being mainly Ibans from Sarawak. Most of them came under their own arrangements and at their own expense, being attracted by the high wage rates prevailing in Brunei. The other half were mainly skilled persons recruited on short-term contracts from Singapore, Hongkong and other Asian countries, the expenses of their journeys to Brunei and repatriation at the end of their contracts being paid by their employers. Because of housing problems only the minority in either category were accompanied by dependants.

Information is not readily available concerning the number of migrants returning to or remaining in the State for further employment after the initial engagement, but the proportion is not thought to be large. Permission to settle permanently is rarely granted.

Employment Placement

Employment exchanges are operated by the Labour Department at Bandar Seri Begawan and Kuala Belait. Since the

EMPLOYMENT

demand for the service is almost entirely confined to school leavers and other unskilled or semi-skilled persons seeking unestablished posts in Government Departments the scale of operations is not large. Applications for registration and vacancies notified and filled during 1971 were as follows:—

	B.S. Begawan			Kuala Belait			Total		
	M	F	T	M	F	T	M	F	T
Applicants registered (including re-registrations)	542	338	880	217	102	319	759	440	1,199
Vacancies notified	139	21	160	99	28	127	238	49	387
Vacancies filled	139	21	160	99	28	127	238	49	387

Comparative figures of registrants aged under 21 years and 21 and over were:—

	Under 21 yrs		21 and over		Total	
	M	F	M	F	M	F
Bandar Seri Begawan	241	169	301	169	542	338
Kuala Belait	106	39	111	63	217	102
Total	347	208	412	232	759	440

Industrial Training

The Government Trade Schools at Bandar Seri Begawan and Kuala Belait provide full time instructional courses in building and engineering trades respectively. The Brunei Shell Petroleum Company has its own vocational school, with courses in electrical, mechanical, instrumentation and aviation engineering trades.

Wages, Hours of Work and Holidays

For the most part wages are based on daily rates except in the oil industry where monthly rates are the rule. There are however exceptions both in Government and in private industry where certain categories of skilled tradesmen, charge hands and foremen are on monthly rates. Tradesmen in the con-

EMPLOYMENT

struction industry are generally paid at contract rates linked to the out-turn per gang of workers, but subject to a guaranteed minimum daily wage. The same system prevails in logging camps.

In the oil industry wages, hours of work, holidays and other conditions of employment are fixed by collective agreements with the trade unions concerned. In other industries wages are determined by reference to the levels generally prevailing in the industry for the type of work involved, and on the average the rates exceed those prevailing in neighbouring territories. The method of payment, deductions, restrictions on the manner in which wages may be spent truck generally are controlled or forbidden by the labour code.

Outside the oil industry, where a 42 hour week has been fixed by collective agreement, normal hours of work are generally based on the eight-hour day and the six day week prescribed by the labour code. The code also prescribes eight days in the year as paid holidays for manual workers, but many employers give paid leave annually or (in the case of migrants) at the end of the term of engagement.

Statistics of wages, earnings and hours of work for the main occupations in the oil and construction industries are contained in Appendix III.

Inspection and Enforcement

All establishments employing manual workers are liable to inspection under the labour code. By virtue of the Labour (Domestic Servants) Rules, 1971, the same applies to hotels, restaurants and other institutions employing lodging and catering service workers. The number of workplaces on record in 1971 as being liable to inspection was 613, but this includes 131 building contractors not all of whom were actively engaged on contracts throughout the year.

In the early part of the year the working of the inspectorate was overhauled and a new and more comprehensive form of inspection report was introduced. Subsequently 202 inspections were carried out, and details of the industries and the numbers and sizes of the places of employment inspected are given in Appendix IV. These figures do not include casual visits or other visits to places not liable to inspection. No inspections were carried out by night.

EMPLOYMENT

With the intensification of inspection work it has become apparent that there is a great deal of room for improvement in the standards observed by a substantial number of both employers and workers in the State. In many instances paysheets were not kept in such a form as to make it possible to see that the requirements of the labour code regarding guaranteed week, overtime and holiday payments were being properly observed; but at several places where an accurate check was possible it was found that they were not. Some of the housing seen on building sites left a great deal to be desired. First aid equipment was usually found to be entirely inadequate. But it was also apparent that many workers do not respond to the efforts of progressive employers to improve their standards. All too often safety instructions are being disregarded, helmets and protective clothing are not being used and housing degenerates through careless usage. For the present it is the policy of the Department to try to effect improvements by advice and encouragement, and not to resort to prosecution except in cases where co-operation is deliberately withheld or warnings are repeatedly ignored. There were no such cases during the year under review.

Industrial Injuries and Workmen's Compensation

The Workmen's Compensation Enactment requires all industrial accidents and cases of occupational diseases to be notified. Subject to certain exceptions (e.g. the Forces, Police Officers and family or casual workers) it covers all manual workers and also non-manual employees if their earnings exceed \$500 per month. It prescribes for temporary disablement half-monthly payments of one third of the workmen's monthly earnings or \$65, whichever is less. The benefits payable for death or permanent disablement are related to 36 or 48 months's earnings, subject to maxima of \$7,200 or \$9,600 respectively. Medical attention and where necessary surgical appliances are also to be provided free of charge to injured workmen. The amount of compensation payable in each case is settled by agreement between the employer and workman concerned and the Commissioner of Labour who is *ex-officio* Commissioner for Workmen's Compensation. For this purpose the Commissioner has powers of enquiry, and the Enactment also provides for arbitration in disputed cases.

The following table shows the number of notifiable accidents reported and the amounts of compensation paid during each of the last three years. More detailed information for 1971 is given in Appendix V.

EMPLOYMENT

Year	Notifiable Accidents Reported	Compensation Paid			
		Temporary Disablement	Permanent Disablement	Death	Total
		\$	\$	\$	\$
1969	116	8,176	29,869	21,420	59,465
1970	146	13,353	32,213	49,337	94,903
1971	125	9,024	28,345	36,000	73,369

The reported accident include several cases in which the injured persons were not eligible for compensation or for one reason or another claims for compensation were not pursued. Moreover there were many accidents involving only temporary disablement for which the injured persons continued to receive full wages while off work, so that the question of compensation did not arise. Comparison between the number of accidents reported and the amounts of compensation paid would therefore be unrealistic.

The oil industry suffered an unusually serious accident during the year under review when a drilling barge caught fire as the result of a gas blow out in the course of drilling operations off the coast of Sarawak. The casualties included five workmen from Brunei of whom four were killed or missing and the fifth was permanently disabled.

Industrial Relations

No collective disputes were brought to notice during the year, although a number of individual complaints were investigated and dealt with by officers of the Labour Department.

All trades unions are required to register under the Trade Unions Enactment, the Commissioner of Labour being *ex-officio* Registrar of Trade Unions. The Trade Disputes Enactment accords to trade unions the customary immunities and protection in respect of acts done in furtherance of trade disputes. It prescribes procedures for conciliation and, subject to the consent of the parties, arbitration in disputes where machinery within the industry concerned does not exist or has failed to achieve a settlement. The Enactment also contains special provisions regarding essential services.

EMPLOYMENT

Combination, whether of employers or workers, is not yet extensively practised in Brunei. This is due principally to differences of race and language, the low degree of industrialisation, the absence of workers with experience of union organisation and the existence of traditional trade guilds among the Chinese who form a majority of the skilled workers in the State. The multiplicity of small places of employment too encourages close personal contact between proprietors or managers and their individual employees, so that except in the oil industry systems of collective bargaining have not yet evolved.

The following is a list of the trade unions on the register at the end of the year, with the date of registration and reported membership:—

Name	Date of Registration	Reported Membership
The Brunei Government Workers's Union	17-7-1962	2,691
The Brunei Oilfield Workers' Union	17-7-1962	601
The Brunei Government Medical and Health Department Employees' Union	2-9-1963	334
The Brunei Government Clerks' and Peons' Union	16-5-1968	180

The registration of two trade unions was cancelled during the year since they had ceased to exist, and a third registration was cancelled at the request of the union. None of the three involved manual workers.

List of Appendices and Sources

- I Application of International Labour Conventions.
- II Industry and Occupation: October, 1971.

Table 1: Number of Wages and Salary Earners and Number and Size of Employing Establishments in Industrial Divisions and Groups.

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Table 2: Wages and Salary Earners in all Industries by Occupation, Sex, Age Group and Residential Status.

III Average Wages, Earnings and Hours of Work: October 1971.

IV Inspection of Places of Employment.

V Industrial Accidents and Workmen's Compensation Payments

Table 1: Notifiable Accidents by Industry and Degree of Injury.

Table 2: Notifiable Accidents by Causation and Degree of Injury.

Table 3: Notifiable Injuries by Occupation and Degree.

Table 4: Notifiable Injuries by Degree and Part of Body Affected.

Table 5: Compensation Paid and Man-days lost by Industry.

Table 6: Compensation Paid and Man-days lost by cause of Accidents.

Sources:

Appendices I, IV and V have been compiled from records kept by the Labour Department. Appendices II and III are derived from returns received from employers.

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APPENDIX I

APPLICATION OF INTERNATIONAL LABOUR CONVENTIONS RATIFIED BY THE UNITED KINGDOM GOVERNMENT

Convention No.	Subject	Position in Brunei
2	Unemployment	Decision Reserved
5	Minimum Age (Industry)	Applied with modification
7	Minimum Age (Sea)	Applied without modification
8	Unemployment Indemnity (Shipwreck)	Applied without modification
10	Minimum Age (Agriculture)	Applied with modification
11	Right of Association (Agriculture) ...	Applied without modification
12	Workmen's Compensation (Agriculture)	Applied without modification
15	Minimum Age (Trimmers and Stockers)	Applied without modification
16	Medical Examination of Young Persons (Sea)	Applied without modification
17	Workmen's Compensation (Accidents)	Decision Reserved
19	Equality of Treatment (Accident Compensation)	Applied without modification
22	Seamen's Articles of Agreement	Decision Reserved
24	Sickness Insurance (Industry)	Decision Reserved
25	Sickness Insurance (Agriculture)	Decision Reserved
26	Minimum Wage-fixing Machinery	Decision Reserved
29	Forced Labour	Applied without modification
32	Protection of Dockers (Revised)	Decision Reserved
35	Old-age Insurance (Industry etc.)	Decision Reserved
36	Old-age Insurance (Agriculture)	Decision Reserved
37	Invalidity Insurance (Industry etc.)	Decision Reserved
38	Invalidity Insurance (Agriculture)	Decision Reserved
39	Survivor's Insurance (Industry etc.)	Decision Reserved
40	Survivor's Insurance (Agriculture)	Decision Reserved
42	Workmen's Compensation (Occupational Diseases)	Applied without modification
44	Unemployment Provision	Decision Reserved
45	Underground Work (Women)	Decision Reserved
50	Recruiting of Indigenous Workers	Applied without modification
56	Sickness Insurance (Sea)	Decision Reserved
63	Statistics of Wage and Hours of Work	Applied without modification excluding Parts II and IV
64	Contracts of Employment (Indigenous Workers), 1939	Applied without modification
65	Penal Sanction (Indigenous Workers)	Applied without modification
68	Food and Catering (Ship's Crews) ...	Decision Reserved

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69	Certification of Ships Cooks	Decision Reserved
70	Social Security (Seafarers)	Decision Reserved
74	Certificate of Able Seamen ...	...	Decision Reserved
81	Labour Inspection ...	...	Applied without modification
82	Social Policy (Non-Metropolitan Territories) ...	...	Applied with modification
83	Labour Standards (Non-Metropolitan Territories) ...	...	Applied with modification
84	Right of Association (Non-Metropolitan Territories) ...	...	Applied without modification
86	Contracts of Employment (Indigenous Workers), 1947 ...	...	Applied with modification
87	Freedom of Association ...	...	Decision Reserved
89	Night Work (Women) (Revised) ...	...	Decision Reserved
90	Night Work of Young Persons (Industry) ...	...	Decision Reserved
92	Accommodation of Crews (Revised) ...	...	Decision Reserved
94	Labour Clauses (Public Contracts) ...	...	Applied without modification
95	Protection of Wages ...	...	Applied without modification
97	Migration for Employment (Revised)	...	Decision Reserved
98	Right to organise and Collective Bargaining ...	...	Applied without modification
99	Minimum Wage Fixing Machinery (Agriculture) ...	...	Decision Reserved
101	Holidays with Pay (Agriculture) ...	...	Decision Reserved
102	Social Security (Minimum Standards)	...	Decision Reserved
105	Abolition of Forced Labour ...	...	Applied without modification
108	Seafarers' Identity Documents ...	...	Applied without modification
115	Radiation Protection ...	...	Decision Reserved
122	Employment Policy ...	...	Decision Reserved
124	Medical Examination of Young Persons (Underground Work)	Inapplicable

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APPENDIX II

INDUSTRY AND OCCUPATION: OCTOBER, 1971

Jadual 1/ Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

Bahagian dan Kumpulan Perindustrian Industrial Divisions and Groups	Bilangan Pekerja ² Number of Workers		Bilangan dan Besar-nya Perusahaan Number and Size of Employing Establishments					Jumlah Total
	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	
1. Pertanian, Kehutanan dan Perikanan/Agriculture, Forestry and Fishing	598	454	144	32	9	6	1	48
11 Pertanian/Agriculture	484	368	116	28	6	5	1	40
12 Kehutanan/Forestry	103	81	22	3	2	1		6
13 Perikanan/Fishing	11	5	6	1	1			2
2. Penghasilan Minyak dan gas Ash/Production of Oil and Naturan Gas	2,850	1,815	1,035	3	2	3		9
3. Kilang Papan, dan lain2 Perindustrian Pengolahan Kayu/Sawmilling and other Timber Processing Industries	431	174	257	2	11	6		19
4. Lain2 Lombong, Kuari dan Perindustrian Pembuatan/ Other Mining, Quarrying and Manufacturing Industries	875	249	626	89	41	4		134

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Jadual 1/Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

Bahagian dan Kumpulan Perindustrian Industrial Divisions and Groups	Bilangan Pekerja2 Number of Workers		Bilangan dan Besar-nya Number and Size of Employing Establishments				Jumlah Total
	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	Lebih over 500 pekerja workers
401 Tambang (Kuari) Batu/ Quarrying	59	9	50	3	1		4
402 Pengolahan Makanan, Minuman atau Tembakau/ Food, Drink or Tobacco Processing	113	27	86	8	5		13
403 Pembuatan Pakaian dan Kasut/Tailoring and Shoemaking	211	51	160	40	9	1	50
404 Pembuatan Perabot dan Perkakas Kayu/ Manufacture of Timber Furniture and Fittings	92	16	76	11	6		17
405 Pencetakan dan Penerbitan/Printing and Publishing	134	73	61		2	2	4
406 Pembuatan Batu Bata/ Bricklaying	74	13	61	1	5		9
407 Pembinaan dan Pembbaikan Kapal/ Shipbuilding and Repairing	24	9	15		1	1	1

EMPLOYMENT

Jadual 1/ Table 1
Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

Bahagian dan Kumpulan Perindustrian Industrial Divisions and Groups	Bilangan Pekerja2 Number of Workers		Bilangan dan Besar-nya Perusahaan Number and Size of Employing Establishments					Jumlah Total
	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	
408 Pembuatan Barang2 Logam sa-lain daripada Logam Berharga/Manufacture of Metal Articles (other than Precious Metals)	75	17	58	10	5			15
409 Pembuatan Barang2 Emas, Perak dan Permata/Goldsmiths, and Jewellers	39	19	20	9	1			10
410 Perindustrian2 Pembuatan yang tidak di-perjeniskan berasingan/ Manufacturing Industries not separately classified	54	15	39	10	4			14
411 Perindustrian Bekalan Listrik/Electricity Supply Industry	370	369	1				1	1
5. Pembinaan Jalan2, Bangunan2 dan Lain2 Kerja Kejuteraan Awan/Construction of Roads, Buildings and other Civil Engineering Works	5,416	884	4,532	39	64	15	11	2 131

EMPLOYMENT

Jadual 1/Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

Bahagian dan Kumpulan Perindustrian Industrial Divisions and Groups	Bilangan Pekerja2 Number of Workers		Bilangan dan Besar-nya Perusahaan Pekerjaan Number and Size of Employing Establishments					Jumlah Total
	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	
6. Perdagangan Jual-Borong dan Jual-Ronchet/Wholesale and Retail Trading Undertakings	1,342	506	836	233	54	6		293
61 Wakil Pengimport Pengeksport dan Pedagang Jual-Borong/Import and Export Agencies and Wholesale Trading Undertakings	545	279	266	40	18	4		62
62. Kedai2 dan Gerai2 Barang2 Minyak dan lain2 Pedagang Jual-Ronchet/ Shops, Stalls, Filling Stations and other Retail Trading Undertakings	797	227	570	193	36	2		231
6. Hotel2, Restoran2 dan Kedai2 Kopi/Hotels, Restaurants and Coffee Shops	540	157	383	33	36	2		71
63. Hotel2/Hotels	92	30	62		5			5

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Jadual 1/ Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

	Jumlah Total	Warga Negara dan lain Per- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	Lebih dari 500 pekerja workers	Jumlah Total
64. Restoran2 dan Kedaai2 Kopi/Restaurants and Coffee Shops	448	127	321	33	31	2			66
7. Pengangkutan, Penyimpanan dan Perhubungan/Transport, Storage and Communications	506	310	196	17	12	7			36
71 Perkhidmatan Pengangkutan Darat/Land Transport Services	160	84	76	8	6	2			16
72 Perkhidmatan Pengangkutan Laut atau Sungai dan Pengendalian Pelabohan/Sea or River Transport and Port Operating Services	142	58	84	3	3	2			8
73 Perkhidmatan Pengangkutan Udara dan Lapangan Terbang/Air Transport and Airport Services	47	30	17		1	1			2
74 Wakil Pelancong dan Perkhidmatan Pembung- kusan dan Penyimpanan/ Travel Agencies and Packing and Storage Services	54	38	16	6	1	1			8

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Jadual 1/Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	Lebih over 500 pekerja workers	Jumlah Total
75 Perkhidmatan Pos, Talipon dan Taligerap/Postal, Telephone and Telegraph Services	103	100	3		1	1			2
8. Perkhidmatan Kewangan, Insuran dan Perdagangan/ Financial, Insurance and Business Services	512	363	149	15	10	5	1		31
81 Bank2 dan lain2 Badan Kewangan/Banks and other Financial Institutions	259	202	57		5	4			9
82 Perkhidmatan Insuran, Akauntan, Undang2 dan lain Perkhidmatan Per- dagangan, termasuk Per- satuhan2 Profesional dan Perdagangan/Insurance, Accountancy, Legal and other Business Services including Professional and Trade Associations	36	17	19	8	2				10
83 Perkhidmatan Kejureraan, Seni-bena dan Teknkl/ Engineering, Architectural and Technical Services	217	144	73	7	3	1	1		12

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Jadual 1/Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	Lebih over 500 pekerja workers	Jumlah Total
9. Perkhidmatan Masyarakat, Sosial dan Persendirian/ Community, Social and Personal Services	2,897	2,140	757	117	55	15	4		190
901 Pentadbiran Awam dan Perkhidmatan Bandaran/ Public Administration and Municipal Services	1,044	996	48	8	6	1	3		18
902 Perkhidmatan Pelajaran, Latehan dan Instruksi/ Educational Training and Instructional Services	739	597	142	3	2	9	1		15
903 Perkhidmatan Ugama dan Kebajikan/Religious and Welfare Services	157	151	6	6					7
904 Perkhidmatan Perubatan, Pergigian dan lain2 Per- khidmatan Kesihatan/ Medical, Dental and other Health Services	23	6	17	12					12
905 Perkhidmatan Keriangnan dan Kebudayaan/ Recreational and Cultural Services	136	119	17		9				9

EMPLOYMENT

Jadual 1/ Table 1

Bilangan Pekerja2 dan Bilangan dan Besar-nya Perusahaan2
Pekerjaan dalam Bahagian2 dan Kumpulan2 Perindustrian
Number of Workers and Number and Size of Employing
Establishments in Industrial Divisions and Groups

	Jumlah Total	Warga Negara dan lain Pen- duduk Tetap Citizens and other Perma- nent Residents	Penduduk Sementara Temporary Residents	1-5 pekerja workers	6-25 pekerja workers	26-100 pekerja workers	101-500 pekerja workers	Lebih over 500 pekerja workers	Jumlah Total
906 Pembaikan Kereta2 dan Basikal/Repair of Vehicles and Bicycles	298	127	171	22	15	2			39
907 Perkhidmatan Pembaikan yang lain/Other Repair Services	278	115	163	20	9	3			32
909 Dobi dan Chuchi Kering/ Laundering and Dry Cleaning	83	5	78	2	6				8
910 Kedai Gunting dan Kedai Solek/Barbers and Hairdressers	118	19	99	22	8				30
911 Seni Gambarfoto dan Perkhidmatan yang Berkaitan/Photography and Related Services	21	5	16	22					22
Jumlah Semua Perindustrian Total All Industries	16,337	7,421	8,916	580	294	69	18	3	964

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APPENDIX II (Contd.) INDUSTRY AND OCCUPATION: OCTOBER, 1971

Jadual 2/Table 2

Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenjian Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group			Taraf Penduduk Residential Status			Occupational Category
		(2) Laki2 Male	(3) P'puan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	
Pekerja2 Iktisias, Teknik dan Pekerja2 yang Berkaitan								Professional, Technical and Related Workers
010 Ahli Kajibumi, Ahli Kimia, Ahli Fizik dan lain2 Ahli Sains Fizikal dan Juruteknik yang Berkaitan	109	105	4		5	18	86	Geologists, Chemists, Physicists and other Physical Scientists and Related Technicians
021 Akitek dan Peranchang Bandar	10	10					10	Architects and Town Planners
029 Jurutera Awan, Jurutera Letrik, Jurutera Mekanikal dan lain2 jenis Jurutera	379	379			20	95	264	Civil, Electrical, Mechanical and other Engineers
031 Juru Ukor	51	51			1	2	48	Surveyors
039 Tukang Pelan, Tukang Lukis dan Juruteknik Kejuruteraan	90	78	11	1	17	21	52	Draughtsmen, Tracers and Engineering Technicians
040 Pegawai Kapal terbang dan Kapal Laut	141	141			35	26	80	Aircraft and Ships' Officers

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Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group (2) (3) (4)	Warga Negara Citizens (5)	Taraf Penduduk Residential Status (6)	Penduduk Sementara Temporary Residents (7)	Occupational Category
050 Ahli Kaji-hayat, Ahli Kajipenyakit, Ahli Agronomi, Ahli Sains Tanah, Ahli Silvika-leha dan lain2 Ahli Sains dan Juruteknik yang Berkaitan	14	14	1	3	10	Pathologists and Animal Scientists, Agronomists, Soil Scientists, Silviculturists and other Life Scientists and Related Technicians
060 Doktor2 Perubatan, Pergigian dan Kehaiwanan	11	10	1	1	10	Medical, Dental and Veterinary Practitioners
070 Pembantu dan Juru- teknik Perubatan, Pergigian dan Kehaiwanan (termasuk Pembantu Rumah Sakit) dan Pekerja yang Berkaitan	18	16	2	5	11	Medical, Dental and Veterinary Assistants and Technicians (including Hospital Assistants) and Related Workers
071 Jururawat dan Bidan dan Pekerja yang Berkaitan	67	16	51	2	7	Nurses and Midwives and Related Workers
110 Akauntan	51	47	4	1	6	Accountants
130 Guru (tidak termasuk Guru Ugama)	389	128	260	1	180	Teachers (other than Religious Teachers)

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki Male	(3) Puan Female		(4) Orang Muda Y. Persons	(6) Penduduk Tetap Permanent Residents	
160 Pelukis dan Perekabento- tok Perdagangan, Jurukam- era dan Pelukis2 Kreatif yang Berkaitan	13	12	1				Commercial Artists and Designers, Photo- graphers and Camera- men, and Related Creative Artists
190 Pekerja Ikhtisas, Pekerja Teknik dan Pekerja2 yang Berkaitan yang tidak di-perjenis- kan berasingan	92	90	2	2			Professional, Technical and Related Workers not separately classified
Jumlah Pekerja Ikhtisas, Teknik dan Pekerja yang Berkaitan	1,435	1,097	336	2	136	364	Total Professional, Technical and Related Workers
Pekerja2 Pentadbir, Pekerja2 Kerja dan Pekerja2 Pengurus							Administrative, Executive and Managerial Workers
210 Pengarah, Pengurus dan Pegawai kanan, dan Pemilik atau Rakan yang Bekerja	538	515	23	82		110	Directors, Managers and Executives, and Working Proprietors or Partners
Pekerja2 Kerani dan Pekerja2 yang Berkaitan							Clerical and Related Workers

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Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur (2) Sex and Age Group Laki2 Male	(3) P'puan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	Taraf Penduduk Residential Status (6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	Occupational Category
300 Penjelua Kerani, Setiasaha Sulit dan Pembantu Peribadi	162	109	52	1	15	80	67	Clerical Supervisors, Confidential Secretaries and Personal Assistants
320 Jurutengkas dan Jurutaip dan Opereter Mesin Pejabat	96	16	80		11	63	22	Stenographers, Typists and Office Machine Operators
330 Penyimpan Kira2, Tukang Wang dan Opereter Mesin Menghitong	190	146	43	1	10	61	119	Bookkeepers, Cashiers and Calculating Machine Operators
350 Penjelua dan Pemereksa Perkhidmatan Pengangkutan dan Perhubungan	14	14			4	6	4	Transport and Communications Services Supervisors and Inspectors
370 Pemilih Surat, Posmen dan Peon	77	62	10	5	64	11	2	Sorters, Postmen and Messengers
380 Operater Talipon dan Taligerap	42	31	11		18	8	16	Telephone and Telegraph Operators
390 Pekerja2 Kerani dan Pekerja2 yang Berkaitan yang tidak di-penjenisan berasingan	891	639	250	2	208	354	329	Clerical and Related Workers not separately classified

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group			(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki/ Male	(3) P'puan Female	(4) Orang Muda Y. Persons		(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	
Jumlah Pekerja Kerani dan Pekerja yang Berkaitan	1,472	1,017	446	9	330	583	559	Total Clerical and Related Workers
Pekerja2 Penjualan								Sales Workers
420 Penjualan, Penjual Bergerak, Penjual Teknik, Wakil dan Penasihat Perkhidmatan, Wakil Pembuat, dan Penjual Insuran, Tanah-Rumah dan Chagaran	32	31	1			14	18	Sales Supervisors, Travellers, Technical Salesmen, Agents and Service Advisors, Manufacturers' Agents and Insurance, Real Estate and Securities Salesmen
450 Pembantu Kedai, Atendan Barong Minyak Petrol, Penjaja dan Pedagang Gerai, Berokar Gadai, dan Pekerja Penjualan yang tidak di-penjemiskan berasingan	607	512	94	1	66	110	431	Shop Assistants, Filling Station Attendants, Hawkers and Stallholders, Pawnbrokers, and Sales Workers not separately classified
Jumlah Pekerja Penjualan	639	543	95	1	66	124	449	Total Sales Workers
Pekerja2 Perkhidmatan								Service Workers
520 Pengelola dan Penyelia Rumah	11	7	4			5	6	Stewards and Housekeepers

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki/ Male	(3) P'ruan Female		(4) Orang Muda Y. Persons	(6) Penduduk Tetap Permanent Residents	
530 Tukang Masak, Pelayan, Penjaga Bar, dan lain2 Pekerja Perkhidmatan Sajian Makanan yang tidak di-penjeniskan berasingan	686	421	260	5	232	91	Cooks, Waiters, Bartenders and other Catering Services Workers not separately classified
540 Amah, dan lain2 Pekerja Perkhidmatan Rumah Tumpangan dan Rumah- Tangga yang tidak di- penjeniskan berasingan	277	107	167	3	107	64	Amahs and other Lodging and Domestic Service Workers not separately classified
550 Penjaga Rumah, Pem- berseh Rumah dan lain2 Pekerja yang Berkaitan	47	19	26	2	22	16	Caretakers, Cleaners and Related Workers
560 Tukang Dhobi, Tukang Chuchi Kering dan Tukang Seterika	69	62	6	1		4	Laundrers, Dry Cleaners and Pressers
570 Tukang Dandan Rambut, Tukang Gunting dan Jurusolek dan Pekerja2 yang berkaitan	121	78	42	1	2	12	Hairdressers, Barbers, Beauticians and Related Workers

EMPLOYMENT

Jadual 2/Table 2

Pekerja2 dalam semua Perindustrian menurut Pekerjaan Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group			Taraf Penduduk Residential Status			Occupational Category
		(2) Laki Male	(3) Puan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	
580 Ahli Bomba Jaga dan lain2 Pekerja Perkhidmatan Perlingdongan	83	80	3		58	8	17	Fire fighters, Watchmen and other Protective Services Workers
590 Pekerja Perkhidmatan yang tidak di-perjenis- kan berasingan	82	75	1	6	43	31	8	Service Workers not separtely classified
Jumlah Pekerja Perkhidmatan	1,376	849	509	18	464	231	681	Total Service Workers
Pekerja2 Pertanian, Ternakan Haiwan dan Kehutanan, dan Nelayan								Agriculture, Animal Husbandry and Forestry Workers, and Fishermen
620 Pekerja Kebun, Tanaman Pasar, Ladang Ternak Lembu, Babi dan Ayam, dan lain2 Pekerja Pertanian dan Ternakan Haiwan	568	511	57		422	15	231	Plantation, Market Garden, Cattle, Pig and Poultry Farm, and other Agricultural and Livestock Workers

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki2 Male	(3) P'puan Female		(4) Orang Muda Y. Persons	(6) Penduduk Tetap Permanent Residents	
630 Pekerja2 Balak dan lain2 Pekerja Kayu, Pemotong Kayu Api, Pemungut Kulit Bakau, Pemungut Rotan dan lain2 Hasil Mashol Hutan, Renjar dan Penjaga Hutan, dan lain2 Pekerja Hutan	190	181	7	2	58	42	90 Loggers and other Timber Workers, Firewood Cutters, Charcoal Burners, and Mangrove Bark Collectors, Rotan and other Forest Produce Collectors, Forest Rangers and Guards, and other Forest Workers
640 Nelayan Laut Pekerja Ternakan Ikan	21	21			11		10 Sea and River Fishermen and Fish Farm Workers
Jumlah Pekerja Pertanian, Ternakan Haiwan dan Kehutanan, dan Nelayan	779	713	64	2	491	57	231 Total Agriculture, Animal Husbandry and Forestry Workers, and Fishermen
Pekerja2 Penghasilan dan Pekerja2 yang Berkaitan, Operater2 Alat2 Pengangkutan, dan Buroh							Production and related Workers, Transport Equipment Operators and Labourers
700 Penyelia dan Pengawas Penghasilan	494	494			106	79	309 Production Supervisors and Foremen

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umor Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki Male	(3) P'ruan Female		(4) Orang Muda Y. Persons	(6) Penduduk Tetap Permanent Residents	
710 Pelombong, Pekerja Tambang Batu (Kuari), Pengorek Telaga Minyak atau Ayer, Pekerja Alat Pengorek, Opereter Jentera Pemecha Batu atau Pemberseh Batu dan Pekerja2 yang Berkaitan	459	456	3	215	181	63	Miners, Quarrymen, Well Drillers, Drilling Big Crews, Stone Crushing or Treatment Plant Operators and related Workers
730 Pekerja Mengawet dan Mengubat Kayu, Pengendali Kilang Papan, Pengendali Kilang Kayu Lapis dan Kayu Veniar, dan Pekerja2 Pengolahan Kayu yang Berkaitan	117	116	1	22	19	76	Celcurisers and Wood Treaters, Sawmill Operatives, Plywood and Veneer Factory Operatives, and related Timber Processing Workers
770 Pengilang Beras dan lain2 Bijirin, Penjual dan Pengolah Daging, Pekerja Mendinginbeku dan Meringer (Men- jemor) Ikan, Pembuat Roti, Pembuat Kueh dan Manis2an dan lain2 Pekerja Pembuatan dan Pengolahan Makanan, Minuman dan Tembakau	66	63	3	2	11	53	Rice and other Grain Millers, Butchers and Meat Preparers, Fish Freezers and Dryers, Bakers, Pastrycocks and Confectionary Makers, and other Food Beverage and Tobacco Processing Workers.

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki2 Male	(3) P'uan Female		(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	
790 Tukang Jahit, Pembuat Pakaian, Pembuat Pelapek dan Alas dan Pekerja yang Berkaitan	207	125	80	2	7	35	Tailors, Dressmakers, Upholsterers and related Workers
800 Pembuat dan Pembalqi Kasut dan lain2 Barang Kulit	6	6				2	Shoe and other Leather Goods Makers and Repairers
810 Pembuat Perabot dan Almari Kayu, Pengukir Kayu dan Pembuat Modal, Opereter Mesin Kerjakayu dan lain2 Pekerja Kayu kechuali Tukang Kayu Pembinaan	75	73	2		8	8	Wooden Furniture and Cabinet Makers, Wood Carvers and Model Makers, Woodworking Machine Operators and other Woodworkers except Constructional Carpenters
834 Opereter Mesin-Alat (Sa-lain daripada Mesin-Alat Kerjakayu)	9	9			3	2	Machine-Tool Operator (other than Woodworking Machine Tools)
839 Tukang Besi, Tukang Pembalqi Gergaji, Chenai Logam dan Tukang Asah Alat dan Pekerja yang Berkaitan	16	14		2	2	1	Blacksmiths, Saw Doctors, Metal Grinders and Tool Sharpeners and Related Workers

EMPLOYMENT

Jadual 2/ Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenjian Pekerjaan	Jumlah Total (1)	Jantina dan Sex and Age (2) Laki2 Male	Kumpulan Umor Age Group (3) P'puan Female	Orang Muda Y. Persons	(5) Warga Negara Citizens	Taraf Penduduk Residential Status (6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	Occupational Category
841 Jurugelas Mesin dan Pemasang Mesin	132	132			30	21	81	Machinery Fitters and Machine Assemblers
842 Tukang Pembaiki Jamtangan, Jam dan Alat2 Jitu	35	35			5	21	9	Watch, Clock and Precision Instrument Repairs
843 Mekanik Kereta Motor	199	192		7	31	57	111	Motor Vehicle Mechanics Mining and Drilling Machinery
844 Mekanik Jentera Pelombong dan Pengorek	57	57			21	17	19	Mechanics
846 Mekanik Jentera Pertanian, Jentera Penolak Tanah atau Jentera Pembinaan	55	55			11	7	37	Agricultural Machinery, Earth- Moving Equipment or Construction Machinery Mechanics Plant and Machinery
Mekanik Jentera dan Mesin								(other than Electrical Plant and Machinery)
847 (Sa-lain daripada Jentera dan Mesin Letrak) yang tidak di- perjeniskan berasingan	238	238			66	84	88	Mechanics not separately classified
848 Tukang Pembaiki Basikal	21	20		1		6	15	Pedal Cycle Repairers

EMPLOYMENT

Jadual 2/Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		Taraf Penduduk Residential Status			Occupational Category
		(2) Laki2 Male	(3) P'uan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents
849 Tukang Minyak Pelichin dan Tukang Gris (kehuai enjin Kapal	47	47			9	6	32
850 Jurugegas dan Mekanik Jentera dan Janakuasa Letrik	53	53			15	20	18
851 Jurugegas dan Mekanik Alatubah, dan Alat Kawal Letrik Perkakas Suis	33	33			14	5	14
852 Jurugegas dan Mekanik Alat2 Letrik yang tidak di-penjeniskan berasingan	148	148			30	66	52
854 Tukang Pembaiki Alat Penerima (Peti) Radio dan Talivishen	15	15			3	3	9
855 Juruletrik dan Pemasang Dawai Letrik Bangunan	138	137		1	8	49	81
857 Juruletrik dan Pemasang Dawai Letrik yang tidak di-penjeniskan berasingan	189	189			130	20	39

EMPLOYMENT

Jadual 2/ Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jumlah dan Kumpulan Umur Sex and Age Group			Terdar Penduduk Residential Status			Occupational Category
		(2) Laki2 Male	(3) P'uan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents	
858 Pemasang dan Mekanik Talipon dan Taligerap	10	10			2	2	6	Telephone and Telegraph Installers and Mechanics
859 Pemasang Kawat dan Penyambung Kabel Tenaga Listrik, Talipon dan Taligerap	178	178			172	5	1	Electric Power, Telephone and Telegraph Linemen and Cable Joiners
860 Opereter Setesen Penjiaran dan Alat Bunyi dan Jurutayang Wayang Gambar	17	17			7	8	2	Broadcasting Station and Sound-Equipment Operators and Cinema Projectionists
871 Tukang Paip dan Jurugegas Paip	132	132			2	5	125	Plumbers and Pipe Fitters
872 Tukang Kimpal dan Tukang Potong dengan Api Oksiasitilin	335	330		5	26	37	272	Welders and Flame Cutters
873 Tukang Ayan, Pembentuk Keping dan lain2 Pekerja Logam Keping	5	5				2	3	Tinsmiths, Panel Beaters and other Sheet Metal Workers
874 Tukang Pasang dan Tukang Tegak, Tukang Pelit dan Tukang Ribet Logam Binaan (sa-lain daripada Telulang Kongkerit)	34	34			2		32	Structural Metal (other than Concrete Reinforcement) Riggers and Erectors, Platers and Riveters

EMPLOYMENT

Jadual 2/Table 2

Pekerja2 dalam semua Perindustrian menurut Pekerjaan Workers in all Industries by Occupation

Penjelasan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Taraf Penduduk Residential Status		Occupational Category
		(2) Laki Male	(3) Puan Female		(4) Orang Muda Y. Persons	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents
880 Tukang Perak, Tukang Emas dan lain2 Pekerja Barang-Kemas dan Logam Berharga	27	27		1		13	13
890 Tukang Bentok dan Tukang Bakar Bata dan Genteng, Tukang Bentok Kacha dan Pekerja Barang2 Tembikar	58	58		2		1	55
900 Tukang Masak dan Penchetakan Tayar dan lain2 Tukang Penghasilan Getah dan Plastik	19	17		1	2	3	15
920 Penchetak dan Pengator Bentok-chetak, Pengukir-foto, Penjilid Buku dan Pekerja yang Berkaitan	99	61	32	6		29	38
930 Tukang Chat, Penulis-tanda dan Juruhias	243	237		6		32	184
940 Pekerja2 Penghasilan dan Pekerja2 yang Berkaitan yang tidak di-penjeniskan berasingan	17	17		1		6	10

EMPLOYMENT

Jadual 2/ Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		(5) Warga Negara Citizens	Terdar Penduduk Residential Status		Occupational Category
		(2) Laki2 Male	(3) P'uan Female		(6) Penduduk Tetap Permanent Residents	(7) Penduduk Semestara Temporary Residents	
951 Pengator Batu-bata, Tukang Batu dan Tukang Ganteng	279	278	1		7	272	Bricklayers, Masons and Tilers
952 Tukang Pembengkok Besi, Pekerja Kongkerit dan Tukang Kemasan Simen	144	144		3	4	137	Steelbenders, Concretors and Cement Finishers
954 Tukang Kayu dan Tukang Sambong Binaan, Pembena Perahu2 dan lain2 jenis Kapal Kayu dan Pekerja Pertukangan Kayu yang tidak di- penjeniskan berasingan	667	664	1	2	22	616	Constructional Carpenters and Joiners, Perahu and other Wooden Boat Builders and Carpentry Workers not separately classified
959 Pekerja Pembinaan yang tidak di-penjenis- kan berasingan	241	241		50	18	173	Construction Workers not separately classified
960 Opereter Injin Pegun dan Alat yang Berkaitan	57	50	7	31	13	13	Stationary Engine and Related Equipment Operators
970 Pengangkutan, Pekerja Pengangkutan Barang, Pemandu Kerin dan Opereter lain2 Alat2 Pengendali Barang2 dan Alat2 yang Berkaitan	231	231		70	8	153	Stevedores, Freight Handlers, Crane Drivers and other Material Handling and Related Equipment Operators

EMPLOYMENT

Jadual 2/ Table 2
Pekerja2 dalam semua Perindustrian menurut Pekerjaan
Workers in all Industries by Occupation

Penjenisan Pekerjaan	Jumlah Total (1)	Jantina dan Kumpulan Umur Sex and Age Group		Taraf Penduduk Residential Status			Occupational Category
		(2) Laki2 Male	(3) P'puan Female	(4) Orang Muda Y. Persons	(5) Warga Negara Citizens	(6) Penduduk Tetap Permanent Residents	(7) Penduduk Sementara Temporary Residents
974 Pemandu Traktor dan Opereter lain2 Jentera Tolak Tanah dan Alat2 yang Berkaitan	202	202			36	10	156
							Tractors Drivers and other Earth Moving Machinery and Related Equipment Operators
981 Serang, Kelasi dan Jurutera Kapal, Anak2 Lancha dan Anak2 Perahu	342	342			107	49	186
							Ships' Deck and Engine-room Ratings, Launch and Boat Crews
985 Pemandu Kereta2 Motor dan lain2 Pengendali Alat Pengangkutan Darat	629	629			272	107	250
							Motor Vehicle Drivers and other Land Transport Equipment Operators
990 Buruh tidak mahir Umum	3,323	3,258	33	32	1,327	344	1,652
							Unskilled General Labourers
Jumlah Pekerja Penghasilan dan Pekerja yang Berkaitan, Opereter Alat2 Pengangkutan dan Buruh	10,098	9,869	162	67	2,935	1,448	5,715
							Total Production and Related Workers, Transport Equipment Operators, and Labourers
Jumlah Semua Pekerja	16,337	14,603	1,635	99	4,504	2,917	8,916
							Total All Workers

EMPLOYMENT

APPENDIX III

AVERAGE WAGES, EARNINGS AND HOURS OF WORK IN SELECTED INDUSTRIAL OCCUPATIONS: OCTOBER 1971

NOTE: The figures in the table have been compiled from returns received from representative employers in the oil industry and construction (including the Public Works Department). They cover fifty percent of the workers in the main occupations in those industries as at the 31st October, 1971.

The average rates of earnings refer to cash earnings only. They do not include the value of housing and other benefits supplied in addition to money wages.

Occupational Group	Percentage of workers paid daily or hourly and monthly rates		Daily or Hourly Rates				Monthly Rates			
			Average normal and actual hours worked per week		Average rates and earnings per hour		Average normal and actual hours worked per week		Average rates and earnings per hour	
	Daily or hourly	Monthly	Normal	Actual	Rate \$	Earnings \$	Normal	Actual	Rate \$	Earnings \$
Chargehands and Foremen	56	44	47	56	2.28	2.56	44	49	3.05	3.16
Fitters and Mechanics	26	74	43	54	2.05	2.32	48	50	2.54	2.87
Electricians and Electrical Wiremen	11.5	88.5	48	50	1.57	1.85	45	48	2.19	2.72
Plumbers and Pipefitters	33	67	49	52	1.52	1.96	45	52	2.02	2.29
Welders and Flame Cutters	8	20	47	53	2.11	2.50	49	50	2.30	2.95
Metal Riggers and Erectors	100	—	48	52	1.24	1.49	—	—	—	—
Painters	95	5	47	46	1.32	1.36	42	43	1.57	1.76
Bricklayers, Masons and Tilers	88	12	48	49	1.73	1.94	42	43	1.60	1.88

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Occupational Group	Percentage of workers paid daily or hourly and monthly rates		Daily or Hourly Rates				Monthly Rates			
			Average normal and actual hours worked per week		Average rates and earnings per hour		Average normal and actual hours worked per week		Average rates and earnings per hour	
	Daily or hourly	Monthly								
			Normal	Actual	Rate \$	Earnings \$	Normal	Actual	Rate \$	Earnings \$
Steelbenders and Concretors	84	16	48	50	1.46	1.51	48	52	1.54	1.85
Carpenters and Joiners	88	12	49	53	1.90	2.02	42	48	1.78	2.02
Stationary Engine and Plant Operators	24	76	47	48	1.10	1.27	45	46	1.24	1.92
Crane and other Lifting Equipment Operators	50	50	48	50	2.87	3.70	52	53	3.39	4.17
Tractor Drivers and Earth Moving Machinery Operators	31	69	47	50	1.62	1.47	46	51	2.23	2.38
Launch and Boat Crews	—	100	—	—	—	—	60	68	1.42	1.50
Road Vehicle Drivers	35.5	64.5	48	54	1.39	1.51	49	53	1.60	1.64
Labourers and Apprentices	89	11	48	50	0.98	1.10	42	47	0.96	1.07
All Groups	55.5	45.5	48	51	1.67	1.92	46.5	50	1.96	2.26

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APPENDIX IV INSPECTION OF WORKPLACES

Industrial Group	Number and Sizes of Workplaces:—					Total
	(a) liable to inspection under the Labour Enactment; and (b) inspected in 1971					
	1-5 workers	6-25 workers	26-100 workers	101-500 workers	Over 500 workers	
Agriculture, Forestry and Fishing	32 3	9 4	6 1	1		48 8
Production of Oil and Natural Gas		1	3		1	5
Sawmilling and Timber Processing	2 1	11 7	6 4		1	2 19
Other Mining, Quarrying and Manufacturing Industries	89 13	41 18	4 1			12 134
Electrical Supply				1		32
Building and Construction	39 31	64 52	15 15	11 4	2	131 102
Wholesale and Retail Distributive Undertakings	78	10	2			90
Hotels and Restaurants	33	36	2			71
Transport, Storage and Communications	1 10	9 10	2 7			12 27
Services	3 62	4 25				7
	13	14	7			87
All industries	345 65	207 108	45 24	13 4	3 1	27 613 202

APPENDIX V

INDUSTRIAL ACCIDENTS AND WORKMEN'S COMPENSATION PAYMENTS

- Notes:** (1) In Tables 1 to 4, injuries resulting in temporary total disablement followed by permanent partial disablement are recorded in both sets of columns under the respective headings. The percentages in the columns headed "Permanent Disablement" represent permanent loss of earning capacity.
- (2) For the purpose of Tables 5 and 6, rest days and holidays have not been taken into account in computing the figures of man-days lost.

Table 1: Notifiable Accidents by Industry and Degree of Injury

	Number of Accidents	Persons Injured or killed	Deaths	Permanent Disablement 100% 51% to 95%	Disblement 21% to 50%	less than 10% 20%	Temporary over 6 mths	Disblement 1-3 mths	Disblement 17-30 days	Severity not known at date of completion 5-16 days
Agriculture, Forestry and Fishing	4	4				2			2	2
Mining, Quarrying and Manufacturing	34	39	6	1		1	1	7	3	8
Construction	72	74	2		3	1	2	13	12	21
Other Industries	15	20	3			3	2	1	8	1
All Industries	125	137	11	1	3	5	5	2	4	28
									16	35
										40

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Table 2: Notifiable Accidents by Causation and Degree of Injury

	Number of Accidents	Persons Injured or killed	Deaths	Permanent Disablement 100% 51% to 95%	21% to 50%	10% to 20%	over 10%	3-6 mths	1-3 mths	17-30 days	5-16 days	Severity not known at date of completion
Power-driven Machinery												
Transmission	6	6						1	1	2		2
Other	9	9			1	2		1	1	1	3	3
Hand Tools												
In hand of person injured	5	5								1	3	1
Not in hand of person injured	1	1										1
Handling materials or equipment other than tools	34	36				1	2	1	8	2	14	11
Stepping of or striking against fixed objects	2	2										2
Struck by moving or falling objects	14	14	1				1		3	3	1	5
Persons falling	21	21			2	1			7	2	5	7
Road Transport	11	14	3				1	1	1	1	3	5
Explosions and Fires	10	17	7	1	1	2		1	4	2	2	
Poisonous, hot or corrosive substances	3	3							1		2	
Other causes	4	4							1		2	1
Cause not known	5	5							1	2		2
All causes	125	137	11	1	3	5	5	2	4	28	16	35
												40

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Table 3: Notifiable Injuries by Occupation and Degree

	Number of Persons Injured or Killed	Deaths	Permanent Disabling			Temporary Disabling			Severity not known at date of compilation
			100% to 95%	50% to 10%	less than 10%	over 6 mths	3-6 mths	1-3 days	5-16 days
Foremen and Mandors	4			1				1	2
Drilling Rig Crewmen	12	3						1	4
Sawmill Operatives	6		1				2		1
Petroleum Refinery Workers	1								1
Grinders	2								2
Fitters and Mechanics	11						1	1	6
Greasers	3							1	1
Electricians and Electrical Wiremen	3						1		1
Welders and Flame Cutters	5						2		2
Structural Metal Riggers and Erectors	3							1	1
Masons	3							1	1
Steelbenders	1			1					
Concreters	1								
Plasterers	1								1

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Table 3: Notifiable Injuries by Occupation and Degree

	Number of Persons Injured or Killed	Deaths	Permanent Disablement			Temporary Disablement			Severity not known at date of completion
			100%	51% to 95%	21% to 50%	less than 10%	over 5 mths	1-3 mths	5-16 days
Carpenters and Wood-working machine operators	7					1	1	2	1
Stationary Plant Operators	6								3
Crane Drivers	1						1		
Stevedores	3						1		1
Tractor and Earth-moving Machinery Operators	3					1			2
Ships' Crewmen	3							1	2
Road Vehicle Drivers	8	1					1	1	2
Cooks	4	1	1			2			
General Labourers	36	1		2	1	3	2	3	10
Professional and Technical Staff (not eligible for Workmen's Compensation benefits)	10	5							
All Occupations	137	11	1	3	5	5	2	4	28
									16
									35
									40

EMPLOYMENT

Table 4: Notifiable Injuries by Degree and Part of Body Affected

	Number of Persons Injured or Killed	Deaths	Permanent Disablement 100% 51% to 95% 21% to 50%	less than 10% 10% to 20%	over 20% more than 50%	Temporary Disablement 3-6 mths over 6 mths 1-3 mths	17-30 days	5-16 days	Severity not known at date of completion
Head	12	2		1		2	1	3	4
Eye	2							1	1
Arm above elbow	3					2			1
Elbow	1								1
Arm below elbow	3					1		1	1
Wrist	2							1	1
Hand	14					4	2	4	4
Thumb	5			1		1		2	2
Finger or fingers	28			3		3	7	15	3
Body above waist	12					2	4	3	3
Body below waist	2					1		1	
Knee	1							1	
Leg below knee	9					1	3	2	2
Ankle	3								3
Foot	11			2	2	1	6	1	3
Multiple Injuries	28	8	1	2	2	1	5	1	11
Particulars not known (missing, believed drowned)	1	1							
All Injuries	137	11	1	3	5	5	2	16	40

EMPLOYMENT

Table 5: Compensation Paid and Man-days lost by Injury

	Number of Accidents	Persons Injured or killed	Compensation Paid			Total \$	With Compen- sation	Man-days lost With Pay	Total
			Temporary Disablement \$	Permanent Partial \$	Total \$				
Agriculture, Forestry and Fishing	2	2		384		384		17	17
Mining, Quarrying and Manufacturing	21	26	1,831	960	9,600	33,991	442	61	503
Construction	52	52	7,193	14,217		35,810	1,596	296	1,892
Other Industries	15	17		3,184		3,184		670	670
All Industries	90	97	9,024	18,745	9,600	73,369	2,038	1,044	3,082

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Table 6: Compensation Paid and Man-days lost by Cause of Accident

	Number of Accidents	Persons Injured or killed	Compensation Paid			Total \$	Man-days lost	
			Temporary Disablement \$	Permanent Disablement \$	Death \$		With Compen- sation	With Pay Total
Power Driven Machinery								
Transmission	4	4	822			822	185	74 259
Other	6	6	965	2,414		3,379	218	90 308
Hand Tools in hand of person injured	4	4	205			205	43	43
Handling materials or equipment other than tools	25	27	1,718	2,594		4,312	392	288 680
Struck by moving or falling objects	9	9	1,033			1,033	244	103 347
Persons falling	16	16	1,116	10,137		11,253	248	97 345
Road Transport	7	9	873	480	14,400	15,753	198	178 376
Explosions and Fires	10	13	814	3,120	21,600	35,134	183	214 397
Poisonous, hot or corrosive substances	3	3	384			384	84	84
Other causes	3	3	832			832	187	187
Cause not known	3	3	262			262	56	56
All causes	90	97	9,024	18,745	36,000	73,369	2,038	1,044 3,082

CHAPTER 5

PUBLIC FINANCE AND TAXATION

THERE has been no change in the system of accounting for public moneys since the last report.

Revenue

There was an increase of \$22,236,200.00 in the total revenue received as compared with 1970. Details are shown hereunder.

Table I — Revenue

Class I	1969	1970	1971
	\$	\$	\$
Duties	8,810,110	8,889,930	9,060,860
Taxes	121,562,821	92,129,689	104,831,783
Licences	712,679	757,611	886,442
Class II			
Fees of Courts or Office	223,220	259,168	321,583
Class III			
B'casting & Information	15,399	17,868	19,189
Civil Aviation	105,197	133,179	154,077
Customs	382,749	469,509	444,062
Education	29,726	34,568	64,790
Electrical	4,236,815	4,533,259	5,370,849
Lang. & Literature Bureau	7,666	40,120	25,617
Marine	182,921	151,639	170,433
Medical & Health	77,126	79,026	86,507
Municipal	486,765	453,545	381,545
Posts	1,005,962	906,515	1,093,312
Prisons	3,622	4,491	4,579
Public Utilities	403,274	439,364	512,261
Public Works	360,343	298,870	396,274
Resettlement	104,368	10,950	24,890
Telecommunications	1,478,463	2,089,673	2,863,168
Class IV			
Royalties, Rents, etc.	41,076,157	35,533,026	39,427,396
Interest, Currency, etc.	40,616,066	38,258,508	37,617,769
Land	135,347	123,630	153,514
Miscellaneous Receipts	624,322	1,160,731	5,100,169
Total	222,641,118	186,774,869	209,011,069

PUBLIC FINANCE AND TAXATION

Expenditure

The total expenditure increased by \$28,686,555 as compared with the previous year.

Table II — Charged Expenditure

	1969 \$	1970 \$	1971 \$
Civil List	1,440,243	1,652,670	1,695,032
H.E. The			
High Commissioner	371,131	354,523	372,492
Election Commission	48,950	42,920	35,315
Pensions, Retiring			
Allowances and Gratuities	3,770,157	4,573,164	4,396,479
Public Service Commission	86,400	86,400	86,181
Auditor-General	32,640	32,640	34,040
Treasury	436,686	327,674	237,386
Supreme Court	25,351	17,015	52,961
Councils of State	334,880	257,797	195,733
	6,546,438	7,344,803	7,105,619

Table III — Supply Expenditure

	1969	1970	1971
Councils of State	307,698	231,425	174,685
Chief Minister & State Secretariat	1,615,788	1,959,054	2,338,992
Adat Isti'adat	234,423	517,768	597,553
Agriculture	1,848,609	2,034,400	2,337,636
Audit	127,366	145,996	158,912
B'casting & Information	1,755,983	1,843,728	1,920,612
R. Brunei Malay Regiment	19,690,208	22,275,187	30,117,209
Civil Aviation	574,281	437,389	652,743
Customs	854,780	983,632	961,786
Development Secretariat	126,902	143,842	149,037
District and Land Offices	3,468,868	2,877,523	2,668,424
Education	17,523,434	19,386,522	22,812,340
Elections	146,204	95,266	50,723
Electrical	6,346,610	6,550,988	7,210,923
Fisheries	120,214	212,153	307,728
Fire Services	963,345	787,739	873,727
Forests	384,969	402,145	437,782
Geological Survey	73,621	93,276	85,972
Religious (Hal-Ehwal Ugama)	4,489,557	4,940,021	5,151,376
Immigration & National Registration	513,748	559,423	626,067

PUBLIC FINANCE AND TAXATION

Judicial	175,486	194,280	183,336
Labour	116,429	154,223	169,113
Lands	308,723	408,592	470,011
Land Transport	187,998	217,853	235,583
Language & Literature Bureau	462,708	606,022	620,396
Legal	143,324	141,711	141,782
Marine	885,980	878,116	853,253
Medical & Health	6,286,940	7,019,781	7,668,808
Miscellaneous Services	14,660,826	15,724,502	27,913,571
Municipal	2,532,262	2,499,400	2,739,830
Museum	258,257	382,247	483,496
Police	6,082,278	6,204,225	7,897,287
Postal Services	971,832	905,326	1,075,146
Prisons	684,740	734,925	756,640
Public Service Commission	59,088	73,511	81,924
Public Works	12,662,679	12,144,881	12,834,485
Resettlement	83,831	83,934	107,030
State Stores & Supplies	625,771	555,546	586,564
State Welfare	270,773	319,046	332,644
Survey	1,146,983	1,207,502	1,285,924
Telecommunications	1,622,546	2,431,988	2,204,288
Treasury	518,823	587,115	602,604
	111,914,885	119,952,203	148,877,942

Table IV — Cost of Adminlstrating the State

	1969 \$	1970 \$	1971 \$
Charged Expenditure			
Personal Emoluments	1,518,488	1,648,351	1,700,464
Other Charges			
Annually Recurrent	4,988,890	5,679,878	5,387,921
Other Charges			
Special Expenditure	39,060	16,574	17,234
Supply Expenditure			
Personal Emoluments	39,316,732	42,894,290	47,530,569
Other Charges			
Annually Recurrent	56,371,791	59,431,994	66,095,047
Other Charges			
Special Expenditure	16,226,362	17,625,919	35,252,326
	118,461,323	127,297,006	155,983,561

PUBLIC FINANCE AND TAXATION

Annual Surplus

Revenue for the year exceeded Expenditure by \$53,027,508. A comparative table showing the surplus for the year 1969 to 1970 is given at Table V.

Table V — Annual Surplus

	1969 \$	1970 \$	1971 \$
Revenue	222,641,118	186,774,869	209,011,069
Cost of Administration	118,461,323	127,297,006	155,983,561
	104,179,795	59,477,863	53,027,508

Development Fund

A sum of \$54,000,000 was appropriated from the Consolidated Revenue Account during the year. The Development Fund Account for the year is as follows:—

Balance as at 1st January, 1971	59,619,561
Appropriation from Consolidated Revenue Account	54,000,000
	113,619,561
Expenditure for 1971	73,934,057
Balance c/f to 1st January, 1972	39,685,504

Development Expenditure for the year with comparative figures for 1969 and 1970 are given in Table VI below:

Table VI — Development Expenditure

	1969 \$	1970 \$	1971 \$
(a) Old Programme			
57. Education	156,956	19,479	—
62. Municipal, Belait & Seria	127,681	37,601	2,053
66. Public Works	212,266	205,205	143,175
67. Water Supplies	20,802	30,233	10,663
69. Service Housing	1,575,219	667,820	381,426
(b) New Programme			
101. Administration	955,463	150,608	43,740
102. Religious Affairs	3,157,125	1,712,758	505,554

PUBLIC FINANCE AND TAXATION

103.	Agriculture	45,559	144,899	278,095
104.	Broadcasting	16,610	33,596	26,847
105A.	Development Office	162,509	153,511	41,545
105B.	Civil Aviation	11,233,017	8,129,468	14,224,566
106.	Education	19,107,594	15,484,331	5,356,310
107.	Electrical	4,140,874	1,477,453	9,997,567
107A.	Forests	72,688	99,846	61,030
108.	Marine	10,413,833	11,333,198	5,899,312
109.	Medical & Health	2,695,443	3,010,435	4,046,794
110.	Municipal, Brunei	82,700	44,368	36,136
111.	Municipal, Belait	323,916	166,299	123,004
112.	Municipal, Tutong	71,087	5,335	136,807
113A.	District Office, Tutong	32,383	427,290	39,118
114.	Police	598,733	609,513	1,279,421
114A.	Prisons	170,207	39,993	1,731
115.	Public Works	26,453,775	29,367,413	28,367,740
116.	State Stores	179,567	12,718	—
117.	Telecoms.	1,234,355	2,014,446	2,412,462
118.	District Office, Belait	265,038	102,566	—
119.	District Office, Temburong	415,883	2,050	11,043
120.	Dist. Office, Brunei	266,743	79,697	77,230
121.	Land Transport	8,289	4,803	—
122.	Survey	129,852	2,522	65,226
123.	Kg. Improvement	10,160	2,739	—
125.	Welfare	769,857	5,606	6,800
126.	Fire Services	157,556	78,624	20,775
128.	Museum	997,092	1,465,337	329,450
129.	Fisheries	98,038	24,826	8,437
130.	Postal Services	80,863	—	—
Total		86,439,733	77,146,586	73,934,057

Statement of Assets and Liabilities

	ASSETS		
	1969 \$	1970 \$	1971 \$
Cash	1,433,661	4,337,861	1,235,111
Investments:-			
Sterling Trustee Stocks	699,787,808	618,873,543	603,757,800
Joint Consolidated Fund	18,756,735	19,182,857	3,825,062
Other Investments	3,965,600	34,068,761	46,712,658
Fixed Deposits	—	22,040,816	29,387,600
	723,943,804	698,503,838	684,918,231

PUBLIC FINANCE AND TAXATION

	LIABILITIES		
	1969	1970	1971
	\$	\$	\$
Consolidated Revenue Account	668,489,636	612,846,727	617,018,554
Consolidated Trust A/c:			
Development Fund	27,966,147	59,619,561	39,685,504
Government Trust Fund	23,324,918	22,352,143	23,645,266
Civil List Reserve Fund	1,139,876	1,194,729	1,043,269
Other Funds	3,023,227	2,490,678	3,525,638
	723,943,804	698,503,838	684,918,231

Part II

DUTIES AND TAXES

Duties:

Export Duties:

These duties are levied on certain products including rubber, copra, sago, livestock, coconut and palm oils; the total amount collected in 1971 was \$42,694.86.

Import Duties:

These duties are levied on a variety of commodities, the principal of which are intoxicating liquors, tobacco, sugar, petroleum products, textiles and vehicles. The total collection in 1971 amounted to \$9,002,197.33.

Excise Duty:

This duty is levied on locally distilled samsu, which is the only alcoholic beverage manufactured in Brunei. There are two distilleries in the State and excise duty collected amounted to \$15,968.24.

Estate Duty:

This duty is levied under the Stamp Enactment on all Estates, the value of which exceeds \$3,000.00. The rates range from 1% on Estates exceeding \$1,000.00 in value but not exceeding \$5,000.00, up to 20% where the value of the Estate exceeds \$10,000,000.00. Estate duty totalling \$134,364.91 was collected in 1971.

PUBLIC FINANCE AND TAXATION

Income Tax:

Income Tax is only levied on the profits of Limited Companies other than Oil Companies at a rate of 30%. Oil Companies pay income tax under special arrangements. The total amount of all income tax collected during the year was \$104,639,735.57.

Stamp Duty:

Stamp Duty is chargeable on a wide range of documents in accordance with the provision of the Stamp Enactment. Stamp duty collected in 1971 totalled \$57,682.54.

Licences:

Fees are charged for Business Registrations and a wide variety of licences are issued for control rather than revenue purposes. The main items covered by licences are Arms and Ammunition, Distilleries, Fishing, Pawnshops, Money Lenders, Rubber Dealers and Vehicles. Revenue from licences amounted to \$886,442.21 in 1971.

Currency and Banking

Currency:

Currency issued by the Brunei Currency Board is legal tender in Brunei as provided in section 13 of the Currency Enactment, 1967. The notes are legal tender at their face value for the payment of any amount and the coins are legal tender up to an amount not exceeding ten dollars in the case of the fifty cent coins and up to an amount of two dollars in the case of lower denominations.

Currency issued by the Board of Commissioners of Currency, Malaya and British Borneo ceased to be legal tender in Brunei with effect from 16th January, 1969.

Members of the Currency Board

Chairman: Yang Berhormat Pehin Orang Kaya Khazanna Negara Laila Di-Raja Dato Laila Utama J. Lee, D.K., S.P.M.B., D.S.N.B., C.B.E., P.H.B.S., P.J.K.

Members: Yang Teramat Mulia Seri Paduka Duli Pengiran Temenggong Pengiran Haji Mohammad bin Pengiran Abdul Rahman Piut, D.K., S.P.M.B., D.S.N.B., P.A.N.B., P.O.A.S., M.B.E., P.J.K.
Awang Chong Thau Fah, S.L.J.
Awang P. L. Ogilvy-Stuart.

PUBLIC FINANCE AND TAXATION

Value:

The parity of the Brunei dollar is 0.290299 grammes of fine gold. Brunei dollars were issued and redeemed against sterling at the rate of £ sterling = BR\$7.3469 minus or plus commission.

Issues and Redemptions:

The Currency Board adopted the following minima for issues and redemptions:—

£10,000	—	Issues
BR\$100,000	—	Redemptions

Notes:

Brunei Currency notes of \$1, \$5, \$10, \$50 and \$100 have been issued. Each bears the effigy of His Highness Seri Begawan Sultan Sir Omar Ali Saifuddin on the obverse and a representation of the Omar Ali Saifuddin Mosque in Bandar Seri Begawan on the reverse.

Coins:

Brunei coins of 1 cent, 5 cent, 10 cent, 20 cent, 50 cent and \$1 denominations have been issued. The 1 cent is of bronze, the 5, 10, 20, 50 and \$1 coins are of cupro nickle. The obverse of each coin bears the effigy of His Highness Sultan Hassanal Bolkiah. The \$1 coin was issued in proof form and in a limited number.

Interchangeability of Brunei, Malaysia and Singapore Currencies:

Malaysia and Singapore currency is acceptable in Brunei as customary tender under reciprocal interchangeability arrangements with the monetary authorities of those countries.

Brunei Currency circulation at 31st December, 1971

Denomination	Circulation
1 cent	13,357.69
5 cent	129,208.45
10 cent	526,557.60
20 cent	707,949.40
50 cent	687,275.00
\$1 coin	4,935.00
<hr/>	
Total Coins	BR\$2,069,283.14

PUBLIC FINANCE AND TAXATION

\$ 1	2,159,975.00
5	930,410.00
10	8,530,275.00
50	16,865,400.00
100	16,495,200.00
Total Notes	BR\$44,981,260.00

Grand Total	BR\$47,050,543.14
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Banking

Banking is controlled by the Banking Enactment 1956 which came into force on 1st January, 1957. Banking facilities, including Savings Bank business are provided by the Hongkong and Shanghai Banking Corporation, the Chartered Bank, Malayan Banking Limited, The United Malayan Banking Corporation Limited and The National Bank Limited.

Post Office Savings Bank

Deposits in the Saving Bank for the period 31st December, 1955 to 31st December, 1971 are shown in the following table:—

Year	Number of Depositors	Amount of Deposits
31-12-55	1,872	\$670,633
31-12-60	1,984	408,374
31-12-65	1,817	342,173
31-12-66	1,818	338,250
31-12-67	1,807	340,935
31-12-68	1,874	174,121
31-12-69	1,846	357,017
31-12-70	1,844	320,854
31-12-71	1,845	292,075

CHAPTER 6

COMMERCE

IMPORTS continued at a higher level than in previous year due to increases in both quantity and value. The revaluation of certain currencies had little effect because of the changes occurring in the latter part of the year under report.

The largest increases were in manufactured articles and machinery and in the case of the latter this was mainly due to capital investment imports by the Liquified Natural Gas project with the bulk of the equipment such as heat exchangers, generators, piping, storage vessels, etc. arriving this year. This increase in capital investment goods was almost solely responsible for the trade deficit but a favourable balance should be restored next year. This will be helped by the export of liquid gas manufactured by the L.N.G. project which is expected to commence regular shipments in late 1972.

The main change in the oil industry was the reduction of exports by pipe line to the Lutong refinery in Sarawak and the direct shipment of light oil by tanker from Seria terminal. The first shipment of this kind took place in December and amounted to over 18,000 Long Tons destined for the Philippines.

For the reasons stated above the tonnage of cargo discharged also showed an increase of over 60,000 tons but this may level off slightly next year. The increase was nearly all discharged at Bandar Seri Begawan wharf.

Import duties collected rose slightly over last year due to the increase in manufactured goods imported.

Export of local produce other than oil remained at last year's levels except for white pepper, the total production apparently being absorbed by the local market due to poorer overseas prices.

The reductions in the value of exports of rubber, natural gas and white pepper was offset by an increase of \$40 million in the value of crude oil.

External Trade

The value of external trade for the State for 1971 was estimated at \$710,345,188 compared with \$548,185,337 for 1970.

The figures are made up as follows:—

	1971	1970	1969
Total value of exports	\$317,536,835	\$292,063,129	\$270,139,966
Total value of imports	\$392,808,353	\$256,122,208	\$221,112,473
Trade Deficit in 1971	\$ 75,271,518	\$ 35,940,921	\$ 49,027,493

COMMERCE

Exports

The F.O.B. value of exports for 1971 was estimated at \$317,536,835 made up as follows:—

	1971	1970	1969
Crude Oil	\$295,221,358	\$276,538,343	\$254,791,521
Plantation Rubber	344,376	399,383	442,550
Jelutong, raw, pressed and refined	105,550	97,421	150,568
Gas, natural	534,363	839,511	832,296
Cow and buffalo hides	42,393	47,840	19,650
Pepper, black	12,431	1,518	6,432
Pepper, white	—	10,195	75,058
Sundries including re-exports	21,276,364	14,128,858	13,821,891
Total	\$317,536,835	\$292,063,069	\$270,139,966

Imports:

The declared value of imports for 1971 was estimated at \$392,808,353 made up as follows:—

	1971	1970	1969
Food	\$ 35,569,075	\$ 34,395,946	\$ 33,807,086
Beverages and Tobacco	7,115,878	7,544,778	7,454,604
Crude materials, inedible except fuel	7,343,836	8,342,634	6,781,236
Mineral fuels, lubricants and related materials	4,880,947	5,679,725	5,327,110
Animal and vegetable oils and fats	1,496,444	1,324,426	1,093,544
Chemical and drugs	18,198,580	12,420,189	12,188,732
Manufactured goods classified chiefly by materials	128,802,206	69,931,077	50,949,215
Machinery & Transport equipment	159,972,287	92,610,583	81,380,133
Miscellaneous manufactured articles	19,148,528	15,499,534	13,108,070
Miscellaneous transactions and commodities not elsewhere specified	10,280,572	8,373,316	9,022,743
Total	\$392,808,353	\$256,122,208	\$221,112,473

COMMERCE

Cargo Tonnage

The total tonnage of cargo discharged and loaded for the year 1971 was as follows:—

Bandar Seri

	1971		1970		1969	
	D'charged Tons	Loaded Tons	D'charged Tons	Loaded Tons	D'charged Tons	Loaded Tons
Bandar Seri						
Begawan	264,710	105,988	207,697	79,920	256,368	14,108
Kuala Belait	150,354	3,664	131,608	1,723	78,519	2,029
Total	415,064	109,652	339,305	81,643	334,887	16,137

Customs Revenue

The total Customs revenue for 1971 amounted to \$9,067,740.50.

Export Duties	\$ 22,091.88	\$ 22,701.25	\$ 30,354.61
Import Duties	9,045,648.62	8,715,998.48	8,765,137.23
Total	\$9,067,740.50	\$8,738,699.73	\$8,795,491.84

Tariff

There was no change in Customs Tariff during the year under review.

Excise

The only alcoholic beverage distilled in the State is samsu, the product of three distilleries. Excise duty is chargeable at \$5.00 per gallon, and duty collected in 1971 amounted to \$17,740.84 compared with \$19,040.43 in 1970.

The Customs Department, under the administration of the Controller, is responsible for the collection of all import and export duties levied in the State.

CHAPTER 7

PRODUCTION

(a) Agriculture

Introduction

THE department is responsible for increasing agricultural production with the aim of import replacement where possible.

Estimated imports of foodstuffs include the following:—

Commodity	Quantity	Value B\$ (m.)
Rice	7,500 tns	3.60
Sugar	7,000 tns	3.20
Tobacco, Cigarettes etc.	2.8 m. lbs	0.24
Milk and Milk Products	4.4 m. lbs	3.85
Meat and Meat Products	754 tns	2.60
Animal Feeds	11,600 tns	3.60
Coconuts	61,600 tns	0.80
Groundnuts and Derivatives	83,000 tns	1.00
Eggs	37 m.	1.20
Day-old Chicks	530,000	0.20

Clearly considerable scope exists for increasing state production of certain items, notably rice, eggs and day-old chicks.

This can be achieved in several ways:—

- (a) increased production by farmers through better application of research and extension services and the proper use of various subsidy schemes.
- (b) the initiation and management of agricultural projects by private enterprise.

To achieve import replacement requires large initial capital as well as sound basic feasibility studies.

Production

1. State

Rubber

Only 163.09 tns., valued at \$156,000 were produced in 1971.

PRODUCTION

Rice

There was a substantial drop in rice production from 1970, partly due to adverse weather. A total of 4312 tns. were produced from 6755 acres. Of this 3414 tns. was produced on 4708 acres of wet padi land (average = 1624 lbs/acre or 304 gantangs/acre).

Two thousand and forty seven acres of hill paddy produced 898 tns., giving an average yield of 983 lbs/acre (184 gantangs/acre). Full figures are given in Appendix B.

Sago

Main production is in the Belait area where 9.52 tons were produced.

Miscellaneous

A wide variety of fruits and vegetables are grown for internal consumption. Exports of these as well as meat to off shore oil rigs amounted to \$490,000. Other exports included 0.96 tns. of pepper (\$1998), 2.90 tns. of lard (\$2900), 500.2 cwts. of buffalo hides (\$24,060) and 29.80 tns. of jelutong (\$48,707).

Buffaloes

There are 15,500 buffaloes in the state. However, of the 3240 slaughtered for meat only 860 were local.

Forty selected bulls were imported under the buffalo improvement scheme.

Cattle

There are 2,271 cattle in the state. Policy is improvement using imported stock of Santa Gertrudis from Australia. These have bred steadily since being introduced and the herd now numbers sixteen animals.

Forty selected Kedah heifers were also imported for cross breeding with local cattle, selected FI males being sold to farmers for upgrading their own stock.

Poultry

Seventy commercial units now exist in the state with imports being gradually reduced.

Pigs

Of the 12,000 pigs slaughtered in the state during the year, 8700 (75%) were produced locally. With this continued improved output self sufficiency should be achieved in the near future.

PRODUCTION

2. District

Brunel/Muara

Paddy was the biggest crop with 1675 acres of wet land producing 1680 tns., (705,700 gantangs) and 695 acres of hill padi giving 395 tns. (165,780 gantangs).

Average yields were 2245 lbs/acre (421 gantangs) from wet padi and 1275 lbs/acre (239 gantangs) from the hill padi.

Temburong

For wet paddy 330 acres were grown, producing 198 tns. (83,340 gantangs) with an average yield of 1347 lbs/acres (253 gantangs).

A small planting of double cropped rice was tried, giving the promising yield of 3840 lbs/acre (720 gantangs).

Hill padi is more popular in this district with 475 acres being planted. Yield was 203 tns. (85430 gantangs) with an average of 957 lbs/acre (180 gantangs).

Total rice produced was 401 tons, giving an average yield of 1118 lbs/acre.

There are some 39 acres of sago palm, 18 acres of coconut, 44 acres of fruit trees mainly rambutan, together with small acreages of bananas, pineapples and various vegetables.

Recently, pepper planting has increased in the district and so far the crop grows well.

Belait

Three hundred and one tons of rice was produced on 933 acres. Wet padi, mainly in the Labi area, produced 246 tns. from 730 acres (average = 741 lbs/acre or 139 gantangs) while hill paddy produced 68 tns. from 203 acres at an average of 725 lbs/acre or 136 gantangs.

Sago is an important crop in this district with scope for improved production.

Sungai Liang and Labi are also the state's most important areas for vegetable production and there are twenty acres of pepper which accounts for most of the state's production.

Tutong

Another district with significant production of rice and vegetables.

PRODUCTION

Total rice produced was 1522 tons from 1973 acres. Of this 1290 tons was from wet paddy. Average yields were 1465 lbs/acre (275 gantang) from wet paddy and 771 lbs/acre (145 gantangs) from hill paddy.

Vegetable production which largely finds its way into the Bandar Seri Begawan markets comes approximately 50 acres.

Agricultural Stations

1. Brunei/Muara District

(a) Luahan

Originally opened as a coconut research station, but now has a collection of other fruit trees and improved pastures. Fruit tree propagation of improved varieties for farmers is carried out, but in future pasture research will be the main activity.

(b) Jerudong

A cattle breeding station where the Santa Gertrudis herd is being developed, as well as cross breeding using selected Kedah cattle imported from Malaysia.

A unit for artificial insemination is now in operation, facilities of which will be made available to farmers for herd improvement.

During the year 19 acres of improved pastures were established using better pasture grasses and legumes; these include **Pangola**, **Branchiaria**, **Guatemala** and **Guinea** grasses, with **Centrosema**, **Pueraria** and **Stylosanthes** as legumes.

(c) Lumapas

A mixed cropping station including paddy, fruit trees and vegetables for seed production. Improved fruit trees, especially rambutans, are produced for local farmers.

(d) Berakas Flower Nursery

A small station producing potted ornamentals for use at official State functions. The staff also advise the public on lawn and ornamental culture.

(e) Mentiri

A station newly opened to cope exclusively with production of improved fruit material for the state.

PRODUCTION

(f) Pangkalan Batu

A small station growing miscellaneous crops. The staff also advise farmers in the area on padi culture.

(g) Kilanas

Mainly used for rice agronomy and to be expanded for this purpose. With the obvious need for rice research in the field of fertilizer application, pest and disease control, assessment of varieties and elementary breeding work, this station will become the main research centre.

Fertilizer and variety trials were carried out and a start was made on selection and purification of local rice varieties which are well adapted and, on results to date, outyield high yielding imported exotic varieties. When final selections are made, stocks will be bulked up for release to farmers.

2. Temburong District

(a) Selangan

Opened in February 1971, this station is intended as a rice research station for the district. So far eight acres have been cleared and planted out of a total of 75 acres. The station will also act as a local advisory centre for demonstration of proper culture of wet padi.

(b) Puni

Used in the past for vegetable work and production of improved fruit trees for local farmers. In future to be used for staff housing, after which most cropping activities will cease.

3. Belait District

(a) Sungai Liang

Used mainly for groundnuts, pineapples, coconuts and mangoes.

Agronomic trials are carried out on the first two crops, while mangoes planted in 1968 have satisfactory yield under a strict regime for pest and disease control.

Bananas have shown improved growth with fertilizer applications, but there was a small outbreak of Panama disease.

(b) Labi

Situated in one of the main citrus areas of the state. Work on this crop has shown favourable response to regular fertilizer applications and pest and disease control.

PRODUCTION

Small trials on wet padi varieties are also carried out to observe fertilizer responses in the area.

(c) Kuala Balai

No work has been done on the sago plantation at this station, but a revival of work on this crop is planned owing to its importance in the area.

(d) Bukit Sawat

Routine work, mainly with fruit tree production continued at this small station.

(e) Batu 3 — Kuala Belait

A very waterlogged station suitable only for sago, which plot is used for fertilizer observations.

4. Tutong District

(a) Berau

Has a wide range of fruit crops, but in future will concentrate on coffee agronomy. During the year 1500 seedlings of robusta coffee and 200 of liberica were planted on terraced hills.

As the only large station in the district, extensive wet paddy trials were carried out as well as agronomic work on passion fruit.

The station also has a herd of Bali cattle.

(b) Lamunin

A small station for production of improved budded fruit trees. Since this is on peat and representative of a large area the range of work will be expanded to find suitable crops for such soils.

Extension

Several methods are used to convey the results of applied work to the farmers. These include visits to farms by extension staff, visits by farmers to agricultural stations for talks and demonstrations, agricultural shows in the districts and extensive use of press and radio for information of immediate practical value.

Pamphlets on special topics are produced for farmers use.

Two home demonstrators in the department travel widely giving advice and demonstrations on domestic matters.

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Subsidy and Improvement Schemes

Various schemes are designed to give direct aid to farmers for crop and livestock improvement.

Fertilizers are available at half price for rice farmers and pest and disease chemicals are given free.

Tractors are also hired at subsidised rates to help farmers, particularly rice growers.

Similar schemes are in operation to improve livestock and their standard of management. These include cattle, buffaloes, goats and poultry. These schemes are now being rationalized on a sounder basis.

Weather

Thirteen stations collect rainfall records in the state. Records for 1971 are given in Appendix A.

Plant Pathology

The plant pathology laboratory was fully equipped to deal with most local problems by mid year. Priority was given to advisory work, disease survey and phytosanitary services. A start was also made on a nematode survey in the state.

Advisory Services and General Observations

A total of 547 specimens were submitted for diagnosis during the year; the breakdown is shown in Table 1.

Table 1

Breakdown of specimens received for diagnosis.

Crop	Number	Percentage
Bananas	9	1.64
Beans	23	4.20
Cereals, grasses, legumes		
cover crops and groundnuts	41	7.49
Non citrus fruit	123	22.49
Vegetables	107	19.57
Ornamentals	82	14.99
Forest trees	6	1.09
Citrus	44	8.04
Rice	29	5.31
Miscellaneous (rubber, chilli, sugar, coffee etc.)	83	15.18
	547	100.00

PRODUCTION

From observations and collections to date the broad disease picture in most crops is now known.

In rice, brown spot (**Helminthosporium oryzae**) is the most prevalent disease, with blast (**Piricularia oryzae**), narrow leaf spot (**Cercospora oryzae**) and leaf spot caused by **Leptosphaeria oryzae** present but not serious.

Disease in the seed bed was considerably less and probably due to the wide use of seed dressing, Ceresan being used for dry planting and an Aretan dip for pre-soaked seed.

Maize is not widely grown although there is scope for increasing the acreage of this crop. Leaf blight (**Helminthosporium maydis**) is common and rust (**Puccinia polysora**) can cause severe damage.

Most leaf vegetables, as well as a number of ornamentals are attacked by the leaf rotting fungi **Corticium solani** and **Choanephora cucurbitarum**.

Downy mildew (**Pseudoperonospora cubensis**) occurs on all cucurbits with occasional serious leaf loss. Leaf spot and stem rot (**Didymella bryoniae**) is widespread and also leafspot caused by **Cercospora citrullina**. Watermelons suffer serious loss every year from anthracnose (**Colletotrichum lagenarium**). Work on chemical control is urgently required.

Longbeans are widely grown but none of the many diseases appear to be limiting factors.

A favourite local condiment is chillis and several diseases are of importance, **Cercospora capsici** and **Choanephora cucurbitarum** attack the leaves while **Glomerella cingulate** causes fruit rot, usually after sunscorch or fruit fly damage.

The state's favourite fruit, rambutans, are relatively disease free, but this year the second flush was seriously attacked by mildew (**Oidium nephelii**) causing stunting of the fruits.

Scab (**Elsinoe fawcettii**) is common on all citrus, but only serious on limes and sometimes mandarins. Unless checked in time, pink disease (**Corticium salmonicolor**) can cause rapid death of young citrus. Tristeza virus has been confirmed in some lime trees.

Bananas are generally of a poor quality and subject to a wide range of diseases. Sigatoka (**Cercospora musae**) is universal and damaging while Panama disease (**Fusarium oxysporum** f. sp. **cubense**) is present.

PRODUCTION

Passion fruit grow very well and the crop appears relatively disease free, although symptoms resembling woodiness virus have been observed.

There appears scope for expansion of the groundnut crop in Brunei, but the **Mycosphaerella** leafspots, particularly **M. arachidis** were common. During the year another potential threat appeared, rust (**Puccinia arachidis**) being found for the first time in the S.E. Pacific area. It is hoped that eradication measures will prove successful.

Legume cover crops are being increasingly used in the State. In **Pueraria** and **Calopogonium** a bacterial leaf spot (probably **Xanthomonas phaseoli**) is common as well as fungal leaf spots caused by **Cercospora bradburyi** and **Ovularia puerariae**.

In forestry crops, two diseases are of note namely **Dothistroma** blight and **Stereum sanguinolentum** on **Pinus caribaea**. It is unlikely that, owing to unfavourable climatic conditions, the former disease will achieve the same dominance as in cooler climates.

No likely alternate host has been found for rust on **Agathis alba**, caused by **Aecidium fragiformae**.

Disease control chemicals have been issued free to framers and full advantage has been taken of this. Dithane M-45 has been found to be the best all round fungicide, but copper and captan are also used.

Appendix E and F give fungicide purchases and a full list of new disease records for the State, respectively.

Seed Testing

Considerable scope exists in Brunei for improvement of seed quality and to further this a small seed testing unit has been set up.

During the year 71 samples, mainly rice and vegetables, were submitted.

All seed produced on Government Stations for distribution to farmers are automatically tested and dressed with an appropriate fungicide. For rice, it is estimated that 60% of the 1971 planting season seed was dressed. Seed fungicides are also issued free to farmers on request and owing to publicity there has been a good response.

PRODUCTION

Plant Import and Export

The phytosanitary legislation was completed and became law during the year and the plant import rules are also ready for printing. One hundred and ten import permits were issued mostly for ornamentals, fruit trees, grass and legume seeds.

Nematodes

A survey of parasitic genera has been initiated on major crops in the state. It is likely that these pests will be of significance in many crops.

Entomology

The entomology work continued under the direction of the plant pathologist with great demand throughout the year on a variety of pest problems. Free chemicals and advice is given to farmers for pest control.

Advisory Services and General Observations

Rice, the State's most important crop, sustained pest attacks throughout the growing season. The most important were stem borers (**Chilo** sp.), mole crickets (**Gryllotalpha africana**), leaf eating caterpillars (**Spodoptera mauritia**), case worms (**Nymphula depunctalis**) leaf hoppers (**Nephotettix** sp.) and black padi bugs (**Scotinophara** sp.). In addition rats, monkeys (mainly **Macaca irus**) and birds can also cause severe losses.

Insect pests have been well controlled using Agrocide, Sevin and Dimecron. Rats are effectively contained using the Warfarin based bait KG 22 which has largely replaced the highly toxic zinc phosphide. Monkeys, where serious locally, are trapped, while birds are frightened away by noise or flashing objects.

Fruit and vegetables also have a wide range of pests, including leaf eating beetles (**Nisotra** sp.; **Epilachna** sp.; **Aulacophora** sp.), cockchafers, mealy bugs, aphids, green stink bugs and scale. Generally the same chemicals as for rice are effective, especially Dimecron.

Cucurbits are especially prone to the melon fruit fly (**Dacus cucurbitae**) and citrus suffers badly from mealy bugs, scales and citrus leaf miner (**Phyllocnistis citrella**) attacks.

Long beans are an important crop in the State. Attack by the bean fly (**Melanagromyza phaseoli**) occurs throughout the year, but is especially destructive in the dry season when complete loss can occur. Chemical control using Dimecron is highly

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effective. During the year imports of a parasite (***Opius melanagromyzae***) for this pest were made and it is thought that this has reproduced here. This form of control, highly effective in Hawaii, will be energetically pursued in Brunei.

Wild pigs cause damage in many localities and there is an increasing demand for pig poison. During the year, 18,747 baits were laid in 47 districts in the State. Phosphorous baits were used.

New insect records are listed in Appendix C, while Appendix D gives quantities of insecticides, molluscicides and rodenticides purchased and distributed in 1971.

Soil Survey and Chemistry

In the early part of the year, a geneal reconnaissance was made of all agricultural stations in the State with a view to selecting a site for the proposed Central Agricultural Reserach Station. As a result, it was agreed by the Director of Agriculture that Birau station located 21 miles from the capital should form the nucleus of the proposed station as the area is representative of a wide range of the soils occurring in the State, a good infrastructure of roads, power and water would be available and large areas of unencumbered land is present in the immediate vicinity. A detailed survey of six thousand acres is currently in progress and the area was aerially survey in July and a topographical map is being prepared.

A considerable amount of advisory work on soil amelioration and fertilizer recommendations has been done particularly on rice, vegetables and tree corps in all districts of the State.

During the latter part of the year, progress was made in getting a small laboratory started, but lack of space, delays in arrival of equipment and chemicals and lack of water due to rationing has precluded any start being made with analytical work. Delivery was taken of a Pye Unicam SP 1800 visible and ultraviolet spectrophotometer and a Pye Unicam 90 Atomic Absorption Spectrophotometer and basic equipment such as furnaces, ovens, pH meters, centrifuge an dequiment for determination of particle size distribution etc. If problems owing to lack of space and water can be solved, it will be possible to have this laboratory working in May, 1972.

Agronomy

Although facilities to carry out necessary research projects fall very short of what are required some progress was made during the year.

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At Kilanas Agricultural Station rice variety trials were undertaken to test six late maturing and seven early maturing varieties on clay and peat soils, with and without fertilizers, making eight individual trials. Growth to date has been good and insect damage minimal. With the installation of inlet and outlet water gates and culvert clearing excellent water control has been obtained. However, further work on improving the layout of irrigation and drainage channels is essential if the whole area on this station is to be put to full use.

At Birau Agricultural Station two trials to investigate times of pruning and spacing of passion fruit were planted. Unfortunately, space on this station does not permit, at present, further work on fertilizer regimes.

conditions pertaining at Sungai Liang, fertilizer response, if change of foliage colour is a criterion, will not occur except in presence of lime. Some improvement was also noted in brinjals, beans and sweet peppers where lime had been incorporated into the soil.

At Sungai Liang Agricultural Station a fertilizer trial on groundnuts was planted. Part of the land was waterlogged and a serious outbreak of groundnut rust (*Puccinia arachidis*) occurred. However, the indications are that under the soil

A fertilizer chequer board observation plot of pineapples provided clues for the poor growth and pink foliage of plants on peat soil. The plot had previously received 500 lb/ac C.I.R.P. (36% P_2O_5) at planting. The chequer board was made up as follows:

No. Lime	No. additional fertilizer
300 lb"/ac	Urea 101 lb/ac
600 lb"/ac	Sulphate of Potash (50% K_2O), 382 lb/ac
900 lb"/ac	Urea + Sulphate of Potash
	Muriate of Potash (60% K_2O), 353 lb/ac
	Urea + Muriate of Potash
	Urea + Muriate of Potash + Sulphate of Potash

The earliest effect was found in those plots which had received urea. Those which were pink and in danger of dying recovered and regained their green colour. Later, those plots which received sulphate of potash showed improved growth and larger fruits. The pineapples on this station had been planted at 3' x 3' and therefore were incorrectly spaced for replicated

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trials of value. So far there appears to be no benefit in the use of lime and the part played by P is unknown. At times during the season the water table was only 10 inches below ground level and some plants toppled over.

Urea was applied to the rest of the pineapples on the station with satisfactory results.

Work is in hand to find out whether the sulphur of Sulphate of Potash plays any part in plant and fruit growth by comparing plots receiving urea and those with ammonium sulphate nitrate.

The Luahan Agricultural Station is to become the State's pasture research station. A museum collection of useful grasses already in Brunei has been started.

About six acres of bush land at the Mentiri fruit nursery has been cleared and early in the year 10,000 rambutans, 2,000 durians and 2,000 mandarin seedlings were germinated. Rough lemon seeds received from Australia were sown and more than 1,000 seedlings produced. Further sowings were made during the year and at present the position stands at:—

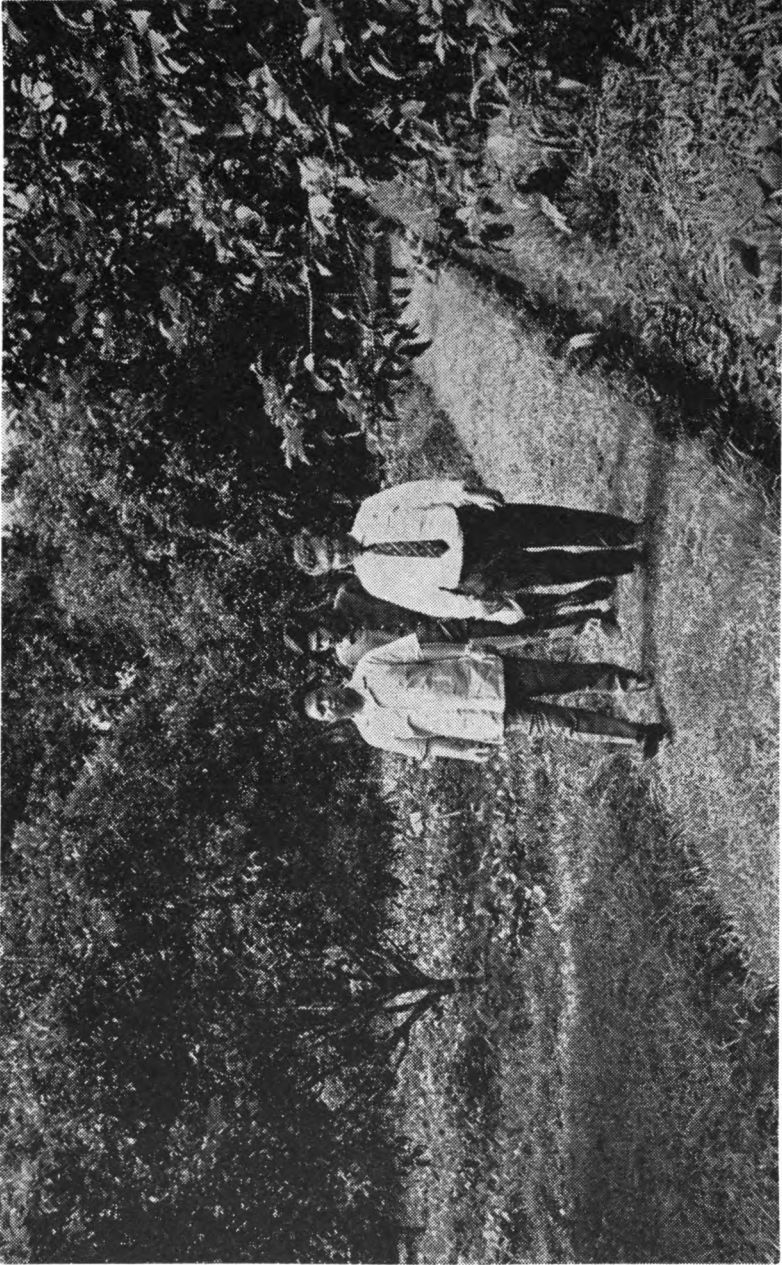
Rambutans	30,228 seedlings
Durians	6,851 seedlings
Mandarins and Rough Lemons	5,675 seedlings
Mangoes	5,343 seedlings
	<hr/>
	48,097 seedlings

Budding has already started and a number of young trees sold.

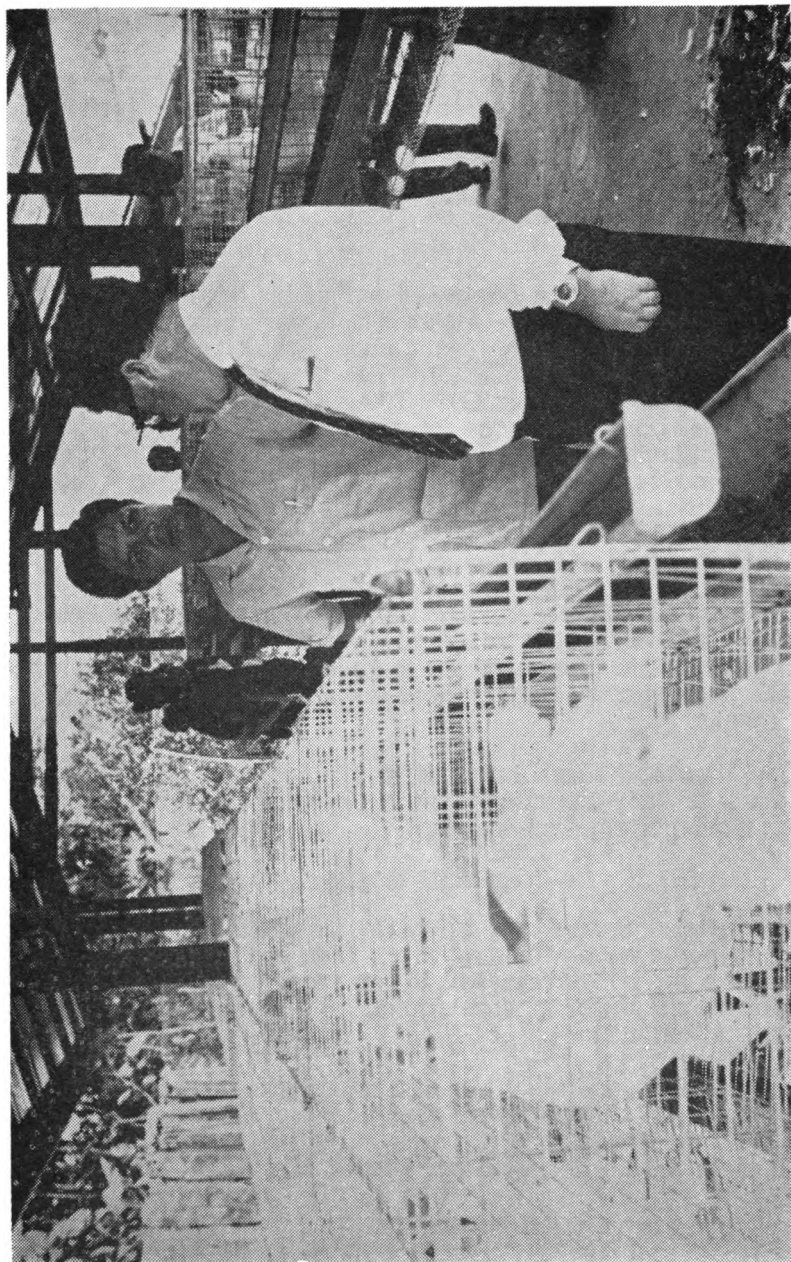
At various sites in the State a single block of rice containing four plots were planted with variety Bahagia; results not available until 1972. Treatments were:—

- Plot 1 — no fertilizer.
- Plot 2 — fertilizer recommendation of 1970/71.
- Plot 3 — fertilizer recommendation of 1971/72.
- Plot 4 — fertilizer replacement of crop of paddy yield at 4,000 lb/ac.

Prior to the 1971/72 season, padi farmers have received fertilizers free of charge from the department in an effort to show that improved yields result from their use. As from this season fertilizers are being sold at half price. Whereas in previous years, most of the fertilizers were quickly taken up by the farmers, this season's sales have been very disappointing. Fertilizers available to padi farmers are Christmas Island Rock Phosphate (36% P_2O_5) and Urea 46% N).



The State Secretary on one of his visits to an agricultural station.



..... Visiting a chicken farm.

PRODUCTION

Veterinary

Entry of animals into the State of Brunei is subject to strict control because the State is free of many diseases which are present in adjoining countries. It is the policy of the department to keep Brunei as disease free as possible.

Appendix G gives details of animal treated throughout the year in the State.

Cattle, buffaloes and goats did not suffer from any serious diseases. Pigs had mainly piglet diarrhoea, virus pneumonia, lung worm and round worm infestations. Prophylactic measures were taken against ranikhet (fowl pest) disease and against fowl pox (Appendix G). The former was not detected in the State while incidence of the latter was considerably reduced. Similarly, the occurrence of coccidiosis in young chickens was reduced. Respiratory disease and fowl coryza responded to sulpa drugs and antibiotics.

Avian leucosis was detected in imported poultry and treatment with antibiotic gave some control. Some dogs and cats suffered from distemper and early treatment with antibiotics were successful. Prophylactic treatment with distemper vaccine is available and this treatment is recommended. Heart worm infestation of dogs and cats is quite common but treatment gave some results.

One thousand three hundred and ninety clinical analyses were made at the Veterinary Clinic as well as one hundred and fifty two post-mortem examinations.

Drainage and Irrigation

Adequate drainage and irrigation is essential to the promotion of increased agricultural production, particularly of padi. This section makes surveys which are essential for the correct siting of drains and irrigation canals. A summary of the work is shown in Appendix H.

Three thousand eight hundred and eighty chains of drains and five hundred and twenty six chains of irrigation canals were constructed or renovated. The area of padi land dealt with was one thousand seven hundred and twenty acres.

Administration

It was with regret that the Agricultural Department staff learnt of the resignation of Mr. K. G. Malet. Mr. Malet was Director of Agriculture from 1st May, 1967 to 27th August, 1971.

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Since 28th August, 1971, Mr. B. R. Hewitt, Agricultural Officer, acted as Director of Agriculture.

Awang Hamid bin Ja'afar, Assistant Agricultural Officer, was appointed Acting Deputy Director of Agriculture with effect from 1st December, 1971.

Mr. D. J. McCrae, Entomologist, joined the Department in October.

Appointment	Approved			
	Establishment	Contract	Local	
Director of Agriculture	1	1	—	
Deputy Director of Agriculture	1		1	
Soils Scientist	1	1	—	
Plant Pathologist	1	1	—	
Agricultural Economist	1			Vacant
Agronomist	1	1	—	
Drainage & Irrigation Officer	1			Vacant
Agricultural Officer	3	2	1	
Veterinary	1	1	—	
Entomologist	1	1	—	
Chief Laboratory Technician	1			Vacant
Assistant Agricultural Officer	8	1	5	2 Vacancies
Senior Agricultural Assistant	9		6	3 Vacancies
Agricultural Assistant	9		6	3 Vacancies
Junior Agricultural Assistant	21		19	2 Vacancies
Senior Veterinary Assistant	6		5	1 Vacant
Veterinary Assistant	6		5	1 Vacant
Laboratory Assistant	2		1	1 Vacant
Rubber Inspector	10		7	3 Vacancies
Livestock Inspector	16		16	
Agricultural Field Inspector	18		16	2 Vacancies
Drainage & Irrigation Inspector	4		4	
Plant Inspector	2		1	1 Vacant
Probationer	1			Vacant
Senior Technical Assistant	1		1	
Mechanical Special Grade	2		1	1 Vacant
Mechanic Grade I	1		1	
Mechanic Grade II	1		1	
Driver Special Grade	1			Vacant
Driver Grade I	6		5	1 Vacant
Driver Grade II	8		7	1 Vacant
Outboard Driver Grade II	4		2	2 Vacancies
Mandor	6		6	
Administrative Assistant	1			Vacant
Clerk Grade "B" Superscale I	1		1	
Home Demonstrator	2		2	
Chief Technical Supervisor	1	1	—	

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Junior Laboratory Assistant	1		Vacant
Senior Technical Supervisor	1		Vacant
Clerk Grade "B"	9	9	
Clerk Grade "A"	1	1	
Stenographer	1		Vacant
Translator	1		Vacant
Typist	1		Vacant
Storekeeper Grade I	1		Vacant
Storekeeper Grade II	2	2	
Peon	5	5	
Horticultural Assistant	1	1	
Tracer	1		Vacant

PUBLICATIONS

Peregrine W.T.H. (1971).

A preliminary note on chemical control of bean anthracnose in Malawi,

P.A.N.S., 17:(1), 47-50.

Peregrine W.T.H. (1971).

Groundnut rust (*Puccinia arachidis*) in Brunei, P.A.N.S., 17:(3), 318-319.

Hewitt, B.R. and Muhamed bin Yasin (1971).

Rice Varieties in the Temburong District of the State of Brunei.
Brunei Museum Jour. 2:(3), 138-141.

PRODUCTION

APPENDIX "A" The Rainfall Record For 1971

Station	J	F	M	A	M	J	J	A	S	O	N	D	Annual
(a) Brunei/Muara District													
Kilanas	6.03	14.14	6.57	2.95	10.24	5.57	3.86	13.79	6.87	10.68	12.72	13.07	106.49
Lumapas	7.65	20.09	3.68	2.43	8.77	4.33	3.37	10.39	10.04	8.80	10.36	13.46	103.37
Mulaut	6.54	13.94	7.20	2.59	7.94	5.20	3.59	18.48	8.19	11.03	13.29	19.36	117.35
Luahan	7.39	10.87	5.36	5.84	7.88	6.24	5.72	13.62	6.25	11.33	13.24	15.50	109.24
Kumbang Pasang	9.04	13.56	12.00	1.61	13.44	8.20	6.01	9.71	7.84	13.15	11.12	10.59	116.27
Semian Berakas	6.28	15.02	9.45	4.60	8.68	3.06	4.38	14.67	6.26	10.25	12.93	10.97	106.55
(b) Tutong District													
Birau	5.91	18.59	1.36	2.30	6.65	6.40	2.90	13.79	9.09	12.56	10.84	16.03	106.42
Pekan Tutong	7.55	12.63	3.16	1.91	3.97	5.38	3.19	16.65	6.21	11.07	8.12	19.81	99.65
(c) Belait District													
Mukim Labi	6.41	11.70	2.83	2.97	5.02	2.64	4.03	8.77	7.12	14.29	13.59	19.28	98.65
Sungai Liang	17.23	9.90	3.21	3.27	10.65	3.98	3.89	14.57	11.61	14.89	12.16	17.84	123.20
(d) Temburong District													
Labu Estate	14.44	25.69	9.42	6.51	13.43	6.54	6.61	22.87	20.63	18.10	17.19	19.90	181.33
Puni	7.98	12.70	10.25	4.45	4.99	5.59	5.60	12.06	10.35	9.68	11.71	15.58	110.94
Selangan			12.06	6.58	17.00	6.38	6.91	25.94	19.23	15.84	16.00	32.70	158.64

PRODUCTION

APPENDIX "B"

Rice Production and Acreages, Season 1970/71

	Production (long tons)			Acreage		Total
	Wet padi	Hill padi	Total	Wet padi	Hill padi	
District						
Brunei/Muara	1,680	395	2,075	1,675	695	2,370
Belait	246	68	314	730	203	933
Temburong	198	203	401	330	475	805
Tutong	1,290	232	1,522	1,973	674	2,647
Total	3,414	898	4,312	4,708	2,047	6,755

Average Yield for the State

Wet Padi 1,642 lbs/ac. or 304 gantangs/ac.

Hill Padi 983 lbs/ac. or 184 gantangs/ac.

1 gantang = 5.33 lbs.

1 Picul = 133 lbs.

PRODUCTION

APPENDIX "C"

New Pest Records In Brunei

1. *Zeuzera* or *Xyheutes* sp.
2. *Scotinophara lurida* Burm.
3. *Mahasena corbeti* Tams.
4. *Alcidodes* sp. nr. *vicarius* Haaf
5. *Neomaskellia bergii* Signoret
6. *Paralecanium vacuum* Morr.
7. *Paralecanium malaianum* Tak.
8. *Saissetia coffeae* (Walk.)
9. *Icerya seysshellarum* (Westw.)
10. *Spodoptera* sp. *litura* F.
11. *Aleurocanthus spiniferus* Quaintance
12. *Paralecanium* sp. nr. *malaianum* Tak.
13. *Aphis gossypii* Glov.
14. *Atherigons orientalis* Schiner
15. *Leptocorisa oratiria* (Fabr.)

The above pests were encountered from various crops during the current season. Specimens were sent for confirmation to the Commonwealth Institute of Entomology.

PRODUCTION

APPENDIX "D"

The following insecticides, rodenticides and molluscicides were purchased by the Department during 1971.

1. Insecticides and Acaricides

Aldrin 20% E.C.	1 gallon
Bidrin E.C.	5½ gallons
Carbaryl 85% W.P.	1 cwt.
Carbaryl/BHC mixture (granules)	2 cwt.
DDT 75% W.P.	4 cwt.
Dieldrin 18% E.C.	8 gallons
Dimethoate	15 gallons
White oil emulsion	45 gallons
Phosphamidon 50% E.C.	113 gallons

2. Rodenticides (Anti-coagulant)

Weatherproof cubes	2700 lbs.
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3. Molluscicides

Metaldehyde bait pellets	400 lbs.
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PRODUCTION

APPENDIX "E"

The following fungicides were purchased by the Department during 1971:

Copper compounds	200 lbs.
Dithiocarbonates	200 lbs.
Organo-mercurials	150 lbs.
Captan	56 lbs.
Thiram	30 lbs.

PRODUCTION

APPENDIX "F"

New Disease Records for Brunel

(IMI numbers in brackets)

On

Achras zapota L. — CHIKU

Gyalectidium aspidotum (Vain) R. Sant.; (156124a)

Strigula elegans var. *antillarum* (Fée.) R. Sant. ex Thorold; (156124b)

Aeolanthus gammwelliae L. — NINDE

Cochliobolus geniculatus Nelson (Curvularia state); (159507a)

Periconia byssoides Pers. ex Mérat; (159507b)

Allamada cathartica L. — ALLAMANDA

Corynespora cassiicola (Berk. & Curt.) Wei; (156129)

Allium cepa L. — ONION

Colletotrichum circinans (Berk.) Vogl.; (156856)

Allium odorum L. — CHINESE CHIVES

Curvularia pallescens Boedijn; (156278)

Anacardium occidentale L. — CASHEW NUT

Meliola anacardii Zimm.; (153082b)

Pestalotiopsis desseminata (Thüm) Steyaert; (153082a)

Ananas sativus L. — PINEAPPLE

Ceratocystis paradoxa (Dade) C. Moreau; (158707)

Annona muricata L. — SOURSOP

Cephaleuros virescens Kunze;

Pestalotiopsis glandicola (Cast.) Steyaert;

Annona reticulata L. — CUSTARD APPLE

Cephaleuros virescens Kunze;

Cephalosporium zonatum Saw.; (158243)

Glomerella cingulata (Stonem.) Spauld. & Schrenk; (153085)

Antigonon leptopus L. — CORAL CREEPER

Oidium sp.

Apium graveolens L. — CELERY

Cercospora apii Fresen; (160831)

Arachis hypogaea L. — GROUNDNUT

Aspergillus flavus Link ex Fr.; (157643)

Cochliobolus geniculatus Nelson (Curvularia state); (158494)

Mycosphaerella arachidis Deighton; (153227)

M. berkeleyi Jenkins; (159512)

Puccinia arachidis Speg.; (155938)

PRODUCTION

Araucaria huntsleri

Mycosphaerella sp.; (154073)

Artocarpus communis Forst. — BREADFRUIT

Cephaleuros virescens Kunze

Asparagus officinalis L. — ASPARAGUS

Cercospora asparagi Sacc.; (154080)

Basella rubra L. — CEYLON SPINACH

Cercospora sp.; (158479)

Begonia sp. — BEGONIA

Cercospora begoniae Hori (156272)

Bougainvillea sp.

Colletotrichum capsici (Syd.) Butler & Bisby; (157626)

Fusarium concolor Reinking; (152232)

Leptosphaerulina trifolii (Rost.) Petrak; (157627b)

Phyllosticta bougainvilleae da Cammara; (157627a)

Brassica chinensis L. — CHINESE CABBAGE

Corticium solani (Prill. & Delacr.) Bourd. & Galz.; (158482)

Caesalpinia pulcherrima Swartz. — PEACOCK'S CREST

Glomerella cingulata (Stonem.) Spauld. & Schrenk; (153119)

Calendula officinalis L. — MARIGOLD

Cercospora calendulae Sacc.

Capsicum annum L. — CHILLI PEPPER

Cercospora capsici Heald & Wolf; (156149)

Choanephora cucurbitarum (Berk. & Rav.) Thaxt.

Gladosporium sp.; (159520b)

Fusarium.; (159520a)

Glomerella cingulata (Stonem.) Spauld. & Schrenk; (157623a)

Microxyphium artocarpi Bat. Nasc. & Cif.; (156859a)

Ophiobolus sp.; (157623b)

Ramularia sp.; (156862)

Carica papaya L. — PAWPAW

Botryodiplodia theobromae Pat.; (159514)

Calonectria diploa (Berk. & Curt.) Wollenw.; (156281)

Corynespora cassiicola (Berk. & Curt.) Wei (150040)

Glomerella cingulata (Stonem.) Spauld. & Schrenk

Phytophthora nicotianae B. de Haan var. *parasitica* (Dastur) Waterh.

Chlorophytum capense var. *variegatum*

Mycosphaerella sp.; (156145)

PRODUCTION

Chrysanthemum indicum L. — CHRYSANTHEMUM

Septoria adanensis Petrak; (156271)

Septoria chrysanthemella Sacc.; (157640)

Citrullus vulgaris L. — WATERMELON

Cercospora citrullina Cooke; (153080c)

Colletotrichum capsici (Syd.) Butler & Bisby; (153079b)

Didymella bryoniae (Auers.) Rehm.; (153080b)

(Recorded 1970 as *Mycosphaerella melonis*)

Citrus aurantifolia Swingle — LIME

Zignoella sp.; (156865)

Tristeza virus

Citrus maxima Merr. — POMELO

Cephaleuros virescens Kunze

Citrus medica L. — CITRON

Penicillium digitatum Sacc.

Citrus nobilis Lour. — MANDARIN ORANGE

Actinostible vanillae Petch (156282)

Botryodiplodia theobromae Pat.

Calloriopsis gelatinosa (Ellis & Mart.) Sydow (Hyperparasite on a *Melioline*)

Chaetasbolisia sp.; (157622b)

Meliola citricola Syd.; (157622a)

Penicillium digitatum Sacc.

Septobasidium pseudopedicellatum Burt.; (156147)

Clerodendron thomsonae Balf. f.; — BLEEDING HEART

Cercospora volkameriae Speg.; (159511)

Cochliobolus geniculatus Nelson (*Curvularia* state); (158491b)

Curvularia eragrostidis (P. Henn.) J.A. Meyer; (158491a)

Coffea robusta Linden — ROBUSTA COFFEE

Anthostoma sp.; (158248)

Coffea liberica Bull ex Hiern. — LIBERICA COFFEE

Cephaleuros virescens Kunze

Crotalaria saltiana

Phyllosticta crotalariae Sacc. & Trott.; (158480)

Cucumis sativus L. — CUCUMBER

Dendryphiella vinosa (Berk. & Curt.) Reisinger; (156854)

Didymella bryoniae (Auersw.) Rehm (*Conidial*); (153081)

Oidium sp.; (157634)

PRODUCTION

- Cucurbita pepo* DC. — SQUASHES, PUMPKINS, GOURDS
 Cerospora citrullina Cooke
 Choanephora cucurbitarum (Berk. & Rav.) Thaxt.
 Colletotrichum lagenarium (Pass.) Ellis & Halst.; (158247)
 Oidium sp.
- Cymbopogon citratus* Staph. — LEMON GRASS
 Puccinia nakanishikii Diet.; (157635)
- Cyrtistachys lakka* Bec. Ridley — SEALING WAX PALM
 Botryodiplodia theobromae Pat.; (156151b)
 Fusarium semitectum Berk. & Rav.; (156151a)
- Dahlia variabilis* Willd. — DAHLIA
 Oidium sp.; (159509)
- Dendrobium* sp. — ORCHID
 Colletotrichum orchidearum Allesch.; (157631)
- Derris elliptica* Benth. — TUBA ROOT
 Myrothecium roridum Tode ex Fr.; (158487c)
 Phomopsis; (158487a)
 Phyllachora yapensis (P. Henn.) Syd.; (158486)
- Diacaenia sanderiana*
 Glomerella cingulata (Stonem.) Spauld. & Schrenk; (156144)
- Digitaria decumbens* — PANGOLA GRASS
 Metasphaeria sp.; (153084)
- Diospyros discolor* Willd. — MOBOLO
 Dimerella epiphylla (Mull. Arg.) Malme; (158249a)
- Durio zibethinus* Murr. — DURIAN
 Glomerella cingulata (Stonem.) Spauld. & Schrenk; (156126)
 Massarina sp.; (158493b)
- Eucalyptus grandis*
 Guignardia sp.; (156146)
- Euphorbia pulcherrima* Willd. — POINSETTIA
 Cerospora pulcherrima Tharp; (156142b)
 Glomerella cingulata (Stonem.) Spauld. & Schrenk; (156142a)
 Phyllostictina euphorbiae Petrak; (156142c)
- Ficus elastica* (Roxb.) Ridley — RUBBER PLANT
 Leptosphaeria doliolum (Pers.) Ces. & de Not.; (159505)
- Fragaria vesca* L. — STRAWBERRY
 Alternaria alternata (Fr.) Keissler; (159955)
 Geotrichum sp.; (159954)
 Mycosphaerella fragariae (Tul.) Lindau (As conidial **Ramularia tulasnei** Sacc.)
 Phomopsis obscurans (Ell. & Ev.) Sutton; (156276)

PRODUCTION

Gardenia augusta Merr. — GARDENIA

Corticium salmonicolor Berk. & Br.

Gladiolus sp. — GLADIOLI

Pestalotiopsis theae (Saw.) Steyaert var. *minor* Steyaert; (156130b)

Phyllosticta gladioloides Batista; (156130a)

Hemerocallis sp. — DAY LILY

Fusarium oxysporum Schlecht.; (158935)

Impatiens balsamina L. — BALSAM

Cercospora fukushiana (Mats.) Yam.; (157629)

Ipomoea aquatica Forsk. — KANG KONG

Albugo ipomoeae — *panduratae* (Schw.) Swing.; (156132)

Ipomoea batatas Poir. — SWEET POTATO

Cercospora timorensis Cooke; (156269)

Jasminum sambac Ait. — JASMINE

Cochliobolus geniculatus Nelson (*Curvularia* state); (159504b)

Cochliobolus lunatus Nelson & Haasis (*Curvularia* state); (159504a)

Phaeoseptoria sp.; (159504c)

Luffa acutangula Roxb. — ANGLED LOOFAH

Botryodiplodia theobromae Pat.

Cercospora citrullina Cooke

Oidium sp.

L. cylindrica Roem. — LUFFA

Cercospora citrullina Cooke

Didymella bryoniae (Auwers.) Rehm; (158244)

Oidium sp.

Lycopersicon esculentum Mill. — TOMATO

Alternaria tenuissima (Kunze ex Pers.) Wiltshire; (159506)

Cochliobolus geniculatus Nelson; (157641a)

Corynespora cassicola (Berk. & Curt.) Wei; (157641b)

Didymella lycopersici Klebahn (*Conidial* state); (157641d)

Glomerella cingulata (Stonem.) Spauld. & Schrenk

(*Colletotrichum* state); (157642)

Phaeotrichoconis crotalariae (Salam & Rao) Subram.; (157641c)

Pseudomonas? iodium (Davis) Tobie.; (B 4947)

Mangifera indica L. — MANGO

Auerswaldiella sp.; (149651)

Botryosphaeria ribis Grossenb. & Dugg.; (156858)

PRODUCTION

Manihot esculentum Crantz — CASSAVA

Botryodiplodia theobromae Pat.

Glomerella cingulata (Stonem.) Spauld. & Schrenk

Mycosphaerella manihotis Syd.; (158492a)

Periconia byssoides Pers. ex Mérat; (158492c)

Mucuna benettii F. Muell. — NEW GUINEA CREEPER

Cephaleuros virescens Kunze

Musa sapientum L. — BANANA

Colletotrichum musae (Berk. & Curt.) Art

Fusarium oxysporum f. sp. cubense (E.F. Sm.) Snyder & Hansen

Parapiricularia musae Ellis & Peregrine; (159524)

Musa textilis Née — ABACA

Mycosphaerella musicola Laech; (154069)

Mussaenda glabra Vahl; Ridley — MUSSAENDA

Cercospora sp.; (156127)

Cephaleuros virescens Kunze

Nephelium eriopetalum Miq.; Ridley

Mycosphaerella sp.; (159523)

Nephelium lappaceum L. — RAMBUTAN

Cephaleuros virescens Kunze

Cercospora sp.; (156131a)

Corticium salmonicolor Berk. & Br.;

Leptosphaeria doliolum (Pers. ex Fr.) Ces. & de Not.; (156131b)

Pleurophragmium sp.; (161909)

Nephelium longana Camb. — LONGAN

Cladosporium tenuissimum Cooke; (157632)

Nicotiana tabacum L. — TOBACCO

Cercospora nicotianae Ell. & Ev.; (153226)

Oryza sativa L. — RICE

Cercospora oryzae Miyake

Fusarium solani (Mart.) Sacc.; (156135)

Leptosphaeria oryzae Sacc.; (156121)

Passiflora edulis Sims f. sp. flavicarpa Deg. — PASSION FRUIT

Aspergillus niger van Tiegh;

Colletotrichum capsici (Syd.) Butler & Bisby; (153228)

Corticium solani (Prill. & Delacr.) Bourd. & Galz.;

Fusarium moniliformae Sheld.; (159521)

Glomerella cingulata (Stonem.) Spauld. & Schrenk

PRODUCTION

Pentas lanceolata

- Cercospora* sp.; (157625b)
- Phyllosticta* sp.; (157625a)
- Phyllostictina* sp.; (157625c)

Persea americana Mill.; — AVOCADO

- Phellinus noxious* (Corner) G. H. Cunn

Pinus caribaea

- Scirrhia pini* Funk & Parker (Conidial state); (154072)
- Stereum sanguinolentum* (Alb. & Schw.) Fr.

Piper nigrum L. — BLACK PEPPER

- Aspergillus flavus* Link ex Fr.; (159956)
- Cephaleuros virescens* Kunze (156866)
- Colletotrichum piperis* Petch; (157636)
- Phytophthora palmivora* (Butler) Butler

Plumeria acutifolia L. — FRANGIPANI

- Corynespora cassicola* (Berk. & Curt.) Wei; (153123b)
- Glomerella cingulata* (Stonem.) Spauld. & Schrenk; (153123c)
- Phomopsis* sp.; (153123a)

Portulaca oleracea L. Ridley — PURSLANE

- Glomerella cingulata* (Stonem.) Spauld. & Schrenk; (158246)

Psophocarpus tetragonobolus DC. — FOUR ANGLE BEAN

- Myrothecium roridum* Tode ex Fr.; (158252)

Pueraria phaseoloides Benth. — KUDZU

- Ovularia puerariae* Sawada; (158250a)
- Periconia byssoides* Pers. ex Mérat; (158250b)

Punica granatum L. — POMEGRANATE

- Aspergillus niger* van Tiegh.

Rosa sp. — ROSE

- Diplocarpon rosae* Wolf (Actinonema state); (157530)

Roupellia grata Hook

- Didymosphaeria* sp.; (156277a)
- Pucciniopsis guaranitica* Speg.; (156277b)

Sauropus androgynous Merr.

- Cercospora phyllanthicola* Shakil & Kamal; (153122)
- Colletotrichum capsici* (Syd.) Butler & Bisby; (158485)
- Glomerella cingulata* (Stonem.) Spauld. & Schrenk; (156137b)

PRODUCTION

Solanum melongena L. — EGGPLANT

- Choanephora cucurbitarum* (Berk. & Rav.) Thaxt.
- Cladosporium oxysporum* Berk. & Curt.; (154076c)
- Eriomycopsis schiffnerulae* Hansford; (156140a),
a hyperparasite on *Schiffnerula solani* Hansford; (156140b)
- Leptosphaerulina trifolii* (Rostr.) Pet.; (153229a)
- Mycosphaerella* sp.; (153229b)
- Phaeoseptoria* sp.; (154076b)
- Phomopsis vexans* (Sacc. & Syd.) Harter; (154076a)
- Pyrenochaeta* sp.; (156280)

Sorghum vulgare Pers. — SORGHUM

- Curvularia pallescens* Boedijn; (156150)

Stylosanthes gracilis H.B.K.

- Hendersonia* sp.; (162694a)
- Phomopsis* sp.; (162694b)

Tagetes erecta L. — AFRICAN MARIGOLD

- Mycosphaerella* sp.; (153120b)
- Phyllosticta* sp.; (153120a)

Tecoma stans Juss.

- Phomopsis* sp.; (156855)

Terminalia ivorensis

- Guignardia* sp.; (156855)

Terminalia ivorensis

- Guignardia* sp.; (154066)

Theobroma cacao L. — COCOA

- Botryodiplodia theobromae* Pat.

Tripsacum laxum — GUATEMALA GRASS

- Leptosphaeria michotii* (West.) Sacc.; (153117)

Vanda sp. — ORCHID

- Stenella* sp.; (159510)

Vigna sesquipedalis L. — LONG BEAN

- Choanephora cucurbitarum* (Berk. & Rav.) Thaxt.; (154079)
- Colletotrichum lindemuthianum* (Sacc. & Magn.) Br. & Cav.
- Oidium* sp.; (156863b)
- Synchytrium* sp. (not *S. dolichi*); (156860)

Zea mays L. — MAIZE

- Aspergillus flavus* Link ex Fr.; (156864)
- Curvularia eragrostidis* (P. Henn.) J.A. Meyer; (15484a)
- Septoria zeicola* Stout; (158484b)

PRODUCTION

Zinnia elegans L. — ZINNIA

Phomopsis sp.; (156152) *

MISCELLANEOUS RECORDS ON DEAD WOOD

Auricularia delicata (Fr.) P. Henn.

Cookeina sulcipes (Berk.) Kuntze

Coriolopsis sp.

Cymatodera elegans Jungh.

Filoboletus manipularis (Berk.) Sing.

Hexagona pulchella Lev.

Lenzites palisotii Fr.

L. sajor — *caju* (Fr.) Fr.

Pleurotus sphathulatus Boedijn

Polyporus grammacephalus Berk.

Stereum lobatum Fr.

Xylaria hypoxylon agg.

ON LAWNS, SOIL AND IN FIELDS

Agaricus sp.

Coprinus sp.

Leucocoprinus zeylanicus (Berk.) Boedijn

Russula sp.

Vascellum pratense (Pers.) Kreisel

Xylaria sp.

MISCELLANEOUS BACTERIA

Bacillus pumilus Gottheil; (B4946)

PRODUCTION

APPENDIX "G"

Prophylactic vaccinations in poultry

District	Ranikhet Vaccination	Raniket 'F' Strain	Fowl Fox
Brunei/Muara	121,355	57,320	37,890
Belait	30,645	24,330	73,640
Tutong	22,800	1,500	17,300
Temburong	1,612	—	—
Total:	176,412	83,150	128,830

PRODUCTION

APPENDIX "H"

Drains and Irrigation Canals

District	Constructed (chains)	Acres land
Brunei/Muara	3,777	1,070
Tutong	356	475
Belait	199	60
Temburong	74	115
<hr/>		
Total	4,406	1,720
<hr/>		

PRODUCTION

(b) Forestry

The Forests

Ecological Classification

The forests of Brunei covering 1,678 square miles, or 75% of the total area of the State may be ecologically classified under the following five types:—

1. **Mangrove Forests** (43.4 square miles), found at sea level and characteristically inundated at high tides by brackish water.
2. **Heath Forests** (18.8 square miles), found on sandy alluvial soils usually below 100 feet above sea level but occasionally also on high altitude sand-stone ridges in Ulu Temburong.
3. **Peat Swamp Forests** (417.4 square miles), found adjacent to the main rivers but separated by forests of types (1) or (2) from the sea. These forests emerge irregularly into
4. **Mixed Dipterocarp Forests** (1,179.1 square miles), lying immediately above the peat swamp forests and extending up to about 4,200 feet above sea level where they give place to
5. **Montane Forests** (20.00 square miles), which are found only in the S.E. of Ulu Temburong adjacent to the State Border up to 6,000 feet above sea level.

Forest Reservation

There were no changes in the area gazetted as Forest Reserves. See Appendix "A".

Demarcation and Maintenance of Boundaries

1. State Boundaries

A rentis was cut through the swamp forest to delineate the State Boundary between Stones 16 and 17. Field work was also started to delineate the watershed between Bukit Sagan and Ulu Selapon. This work was necessary in order to prevent further encroachment of forest working over the State Border from Sarawak.

PRODUCTION

2. Forest Reserve External and Internal Boundaries

No further clearing was done.

3. Communications

The clearing of a rentis and inspection road for water pipelines between Seria and Lumut and Badas and Lumut has facilitated access to these areas.

The State of dis-repair of the Labi Road throughout the year restricted forest exploitation beyond Bukit Puan.

4. Legislation

1. Converted timber was declared as an item subject to import restriction under the Customs Enactment 1954 (Gazette Notification No. S 115/71).
2. The Conservator of Forests was authorized by virtue of Rule 14 of the Forest Rules 1955 to charge a premium on forest produce taken under permit or licence (Gazette Notification No. S 163/71).

5. Forest Policy

During the year there was no change in the stated forest policy which is designed to conserve the forest produce of the State for fostering home industries and to provide cheap timber for internal consumption by several restricting exports. Due to surplus production of logs in the Region and to international monetary considerations, the pressure for export of forest produce eased and the following forest projects were abandoned:—

1. A project for a combined sawmill, veneer and pulpwood factory based on Kampong Danau — as sufficient participation of Brunei citizens in such a complex scheme could not yet be assured.
2. A project for chipping Bakau for rayon manufacture — as aerial photographs showed that adequate supplies of Mangrove forest were not available without jeopardizing supplies of poles for internal requirements.
3. Two projects for using foreign capital to finance forest and sawmill management for timber exports — as being contrary to forest legislation restricting exports of timber.

The Conservator of Forests was guided by the advice of the Timber Licencing Advisory Board on all matters concerning the issue and cancellation of forest permits and licences. The policy of increasing the participation of Brunei citizens in the forest and sawmilling industry was unreservedly followed.

PRODUCTION

6. Management

The forests of Brunei continued to be managed intensively to ensure the exploitation of all logs suitable for sawmilling.

7. Protection

\$6,089 (\$6754) was collected in compensation and compounding fees during the year. See Appendix B.

An enumeration of losses of timber sustained from the encroachment into Brunei of a timber licensee from Sarawak (Terusan) showed that an estimated 6,380 tons (hoppus) of logs had been felled with current F.O.B. value of \$535,920. A claim for compensation has been made.

8. Royal Assessment

The method of measurement of logs for royalty was changed from mid-girth to mean diameter at smaller end, except in the case of logs measured in rafts, for which mid-girth measurements were retained.

9. Exploitation

Following the cancellation of all permits and licences not currently being worked the acreage under timber felling permits was reduced to 6,105 acres (16,772) and under licences to 82,885 acres (120,210). See Appendix C and D.

10. Natural Regeneration

Poison-girdling of relics and under-storey trees down to 6" diameter as prescribed under the Malayan Uniform System of Silviculture was continued throughout the year.

This system of silviculture is proving very effective in establishing a new crop with a higher proportion of Dipterocarp and other desirable timber species than previously existed. During the year 738 acres of Andulau and Ladan Hills Forest Reserves were treated at a cost of \$24,194 using 10,736 lbs. of Sodium Arsenite.

11. Production

Total production figures of all classes of Forest Produce are given in Appendix E.

(a) Logs

The volume of logs extracted to sawmills was 51,458 (53,273) tons. There was no shortage of logs at the mills and by the end of the year sawmill stocks had risen by 1,673 tons. See Appendix F.

PRODUCTION

(b) Minor Forest Produce.

1,505 (858) piculs of Jelutong latex were tapped and exported. The F.O.B. value was \$134,864 (79,621). The local demand for mangrove poles increased.

12. Sawmills

A total of 27 (26) sawmills operated during the year. The log input was 49,787 (53,316) tons (hoppus) and the sawn out-turn was 26,574 (28,563) tons representing a recovery of 53%.

Full details of the mills, their equipment and labour force is given in Appendix G.

The decline in demand for sawn timber within the State follows the completion of several major projects in the building industry. Heavy constructional work stimulated the demand for Selangan Batu of which 2,137 tons (1,725) were sawn. Otherwise there were no significant changes from 1970. See Appendix H.

The new sawmills opened, one near Labi and one at Kuala Belait. Two major town-based mills closed, one at Kuala Belait and the other in Bandar Seri Begawan and also a smaller mill at Tutong. Two forest-based mills (Temburong and Ulu Belait) closed. One mill was destroyed by fire. All these mills had abundant supplies of logs available.

Sawmills in Temburong were finding competition increasingly difficult due to high transport charges to the Brunei market.

There was a ready market for off-cuts for firing local brick-kilns.

The relatively large number of sawmills in relation to the small quantity of logs sawn is due to the general practice of allowing each permit or licence holder to erect a sawmill for his own requirements. Details of local timber prices are given in Appendix I.

Two Celcure plants were in operation throughout the year.

13. Imports

The imports of sawn timber from Sarawak fell in value from \$56,117.92 to \$21,969.00. Only 34 tons of sawn timber were imported in direct competition with local timber from Brunei forests. Of other local timber 62.21 tons of sawn Belian was imported, and a further 36 tons in the form of attap shingles. Belian is in very short supply in Brunei forests. Details are recorded in Appendix J.

PRODUCTION

14. Exports

994 (961) tons of sawn timber was exported valued at \$211,703 (\$208,253). Of this quantity 949 tons was Ramin (*Gonystylus bancanus*), the only timber of which unrestricted export is permitted as having only a limited market within the State. See Appendix K.

15. Finance

Revenue and Expenditure

Total forest revenue from all sources was \$399,650 (\$398,651). See Appendix L.

Expenditure was \$485,292, as detailed in balance sheet. See Appendix M.

16. Silviculture

Species Trials

All trials of exotic species were discontinued as from 1970, sample plot measurements and the maintenance of existing plantations only were carried out as prescribed during 1971.

The year 1971 was a light seeding year for *Dipterocarps*, and seeds of Kapur (*Dryobalanops beccarii*) and Engkabang (*Shorea macrotera*) were collected and raised in the Nursery for enrichment plantations in 1972. Silvicultural work was otherwise limited to poison-girdling operations (see above).

Anti-erosion and Amenity Planting

The planting of trees to prevent erosion of soil on newly constructed sites and road-embankments was the responsibility of the Department. The value of this work is proving of considerable importance especially at Berakas Camp and along the Labi Road. See Appendix N.

17. Education

Through the courtesy of the Director of Forestry, West Malaysia, post-graduate training in tropical forestry was provided by the Forest Research Institute at Kepong for one Brunei forest graduate. After the successful completion of this course this officer assumed the duties of Silviculturist.

Only one of the two Forest Guards from Brunei who attended the General Course at Kepong was successful in obtaining a pass.

18. Administration

For the purposes of forest administration the State is divided into two districts Brunei and Kuala Belait. The former comprises all forest areas lying adjacent to and east of Sungai Tutong and includes Temburong, whilst all other forest areas to the west of

PRODUCTION

Sungai Tutong are administered from Kuala Belait. Fully qualified District Forest Officers are now in charge of these two districts.

The Forest Officer at Tutong was maintained under a Forest Ranger as a convenient centre for forest staff, mainly engaged in Revenue Collection.

From June to October, Awang Mahari bin Mohd. Said, B.Sc. acted as State Forest Officer during the absence of Mr. I. P. Tamworth on vacation leave.

The Staff as at 31st December 1971 was as follows:—

Appointment	Approved Establishment		Staff	
	1970	1971	1970	1971
Conservator of Forests	1	1	1	1
District Forest Officer	2	2	2	2
Silviculturist	1	1	1	1
Plantation Officer	1	1	1	1
Sub-Assistant Conservator	1	1	Vacant	Vacant
Forest Ranger Grade I	3	3	3	3
Forest Ranger Grade II	4	4	3	4
Timber Inspector/Grader	3*	—	—	—
Foresters	10	10	10	10
Forest Guards	24	27*	24	27
Forest Labourers	19	19	19	19
Chief Clerk	1	1	1	1
Clerk Grade "B"	3	3	3	3
Clerk Grade "A"	3	3	2	3
Draughtsman	1	1	1	1
Translator	1	1	1	1
Driver/Mechanic	1	1	1	1
Vehicle Driver	2	2	1	1
Outboard Driver	2	2	2	2
Total	85	85	78	83

* Posts abolished and now included under Forest Guards.

19. Buildings

Construction was started on four semi-detached Class "G" quarters at Sungai Liang, but had not been completed by the end of the year.

PRODUCTION

APPENDIX "A"

Areas in Acres of Constituted Forest Reserves on 31st December, 1971

District	Constituted Reserve	Area in acres on 1-1-1971	Area in acres on 31-12-1971	Number of Notification
Belait	Labi Hills	263,000	263,000	38/1950
Belait	Anduki	2,264	2,264	114/1948
Belait	Badas	65	65	133/1948
Belait	Arboretum	56	56	71/1948
Belait/Brunei	Andulau	30,690	30,690	64/1940
Brunei	Ladan Hills	84,000	84,000	79/1951
Brunei	Berakas	860	860	161/1957
Brunei	Batu Apoi	111,500	111,500	247/1957
Brunei	Selirong	6,175	6,175	29/1948
Brunei	Labu	22,200	22,200	50/1954
Brunei	Peradayan	2,650	2,650	192/1953
Total		523,460	523,460	

PRODUCTION

APPENDIX "B" Forest Offences

District	Section/Rule	Cases	Compounding Fees	Compensation and Fines	Total
Brunei	4.1(a)	3	\$1,030.00	—	\$1,030.00
Brunei	5.(2)	2	—	\$1,846.00	1,846.00
Brunei	8.(3)	1	50.00	—	50.00
Brunei	19(b)	5	350.00	—	350.00
Brunei	4.1(a)	1	80.00	—	80.00
Brunei	17.1(a)	14	—	70.00	70.00
Belait	4.1(a)	3	665.00	—	665.00
Belait	16	1	250.00	—	250.00
Belait	5.(2)	3	—	1,718.00	1,718.00
Belait	17.1(a)	6	—	30.00	30.00
Total		39	\$2,425.00	\$3,664.00	\$6,089.00

PRODUCTION

APPENDIX "C" Acreage Under Permits

Forest Reserve	As on 1-1-1971	Cancelled 1971	Issued 1971	As on 31-12-1971
TIMBER				
Peradayan Forest Reserve	1,777		—	1,777
Ladan Hills Forest Reserve	8,045	7,677	—	368
Labu Forest Reserve	206	—	—	206
Labi Hills Forest Reserve	4,682	3,148	—	1,534
Andalau Forest Reserve	2,062	710	868	2,220
Total		11,535	868	6,105
FIREWOOD, POLES, ETC.				
Labu Forest Reserve	16,772		—	1,502
Selirong Forest Reserve	1,502	—	—	1,183
Total	1,183	—	—	2,685

PRODUCTION

APPENDIX "D"

Acreage Under Licences

District	As on 1-1-1971	Cancelled 1971	Issued 1971	As on 31-12-1971
TIMBER				
Brunei	86,256	43,063	—	43,193
Belait	33,954	3,859	9,597	39,692
Total	120,210	46,922	9,597	82,885
FIREWOOD, POLES, ETC.				
Brunei	2,058	—	—	2,058
Total	2,058	—	—	2,058

APPENDIX "E"
(a) Out-turn in Cubic Feet of Timber and Fuel During 1971

Forests	Heavy Hardwood Round	Other Timber Round	Total Timber Round	Poles (Nos.) Mangrove	Other	Firewood* Mangrove	Other	Charcoal (Piculs)
Forest Reserve	104,863	715,991	820,854	53,036	—	20,190	—	10,360
Other Forest	129,297	1,706,601	1,835,898	—	15,957	2,213	108	—
Total	234,160	2,422,592	2,656,752	53,036	15,957	22,403	108	10,360

* Cubic feet stacked.

(b) Out-turn of Minor Produce During 1971

Forests	Getah Jelutong (Piculs)	Nilbong (Nos.)	Rotans (Piculs)	Tree Sales (Nos.)
Forest Reserve	862	—	120	—
Other Forest	643	100	623	751
Total	1,505	100	743	751

(1 Picul = 133 lbs.)

PRODUCTION

APPENDIX "F" Log Production (at Sawmill) (in tons of 50 cu. ft. Hoppus)

	HEAVY HARDWOODS		MEDIUM HARDWOODS				LIGHT HARDWOODS					Total
	All Species	Kapur Bukit	Kapur Paya	Keruing	Red Meranti	Other Meranti	Alan	Ramin	Medang Tabac	Others		
Forest Reserve												
Belait District	1,815	1,735	49	2,102	2,569	1,805	1,474	56	46	2,289	13,940	
Brunei District	281	223	—	402	677	187	—	20	37	737	2,564	
Total Forest Reserve	2,096	1,958	49	2,504	3,246	1,992	1,474	76	83	3,026	16,504	
State Land Forest												
Belait District	1,598	1,534	311	2,023	1,691	2,235	8,058	4,262	1,176	4,619	27,507	
Brunei District	908	606	491	1,009	1,144	1,713	92	119	689	676	7,447	
Total State Land	2,506	2,140	802	3,032	2,835	3,948	8,150	4,381	1,865	5,295	34,954	
Total Log Production	4,602	4,098	851	5,536	6,081	5,940	9,624	4,457	1,948	8,321	51,458	

PRODUCTION

APPENDIX "H" Timber Production and Movement (in ton of 50 cubic feet)

	HEAVY HARDWOODS			MEDIUM HARDWOODS			LIGHT HARDWOODS					Total
	All species	Kapur Bukit	Kapur Paya	Keruing	Red Meranti	Other Meranti	Alan	Ramin	Medang Tabac	Other		
Sawmill Production												
Belaït District	1,651	2,244	277	2,802	2,644	2,573	3,809	1,609	149	3,802	21,560	
Brunei District	486	362	331	791	1,061	757	43	62	401	720	5,014	
Total Sawn Production	2,137	2,606	608	3,593	3,705	3,330	3,852	1,671	550	4,522	26,574	
Sawn Imports	64*	4	—	—	—	—	29	—	—	—	97	
Sawn Exports	—	—	—	14	—	28	—	949	—	4	995	
Sawmill Stock on 31-12-71	405	228	6	301	250	272	480	369	30	717	3,058	
Sawmill Stocks on 1-1-72	430	210	62	435	150	299	266	267	121	579	2,819	
Local Use (Sawn)	2,226	2,592	664	3,713	3,605	3,329	3,667	620	641	4,380	25,437	

Note: * Includes 62 tons of Belian sawn timber.
36 tons of Belian shingles were imported during 1971.

APPENDIX "T"

Local Timber Prices

	HEAVY HARDWOODS		MEDIUM HARDWOODS		LIGHT HARDWOODS		
	Selangan Batu Resak (1)	Kapur Bukit (2)	Kapur Paya (2)	Keruing (3)	Meranti (4)	Alan (5)	Mixed Light Hardwoods (5)
1. Beretices under 2" x 3"	B\$320	B\$210	B\$175	B\$170	B\$170	B\$140	B\$150
2. Scantlings 2" x 3" up to 4" x 4"	320	210	175	170	170	140	150
3. Scantlings 2"x5" over to 54 square inches cross-section inclusive, but under 9" width.	320	210	175	170	170	140	150
4. Boards 3" up to 13" thick and 4" to 8" wide inclusive.	350	220	190	190	180	160	160
5. Boards under 3" thick and 4" to 8" wide inclusive.	350	220	190	180	180	160	160
6. Boards and Planks 1" up to 6" thick and 9" to 12" wide inclusive.	300	210	175	170	170	140	150
7. Boards under 1" thick and 9" to 12" wide inclusive.	350	220	190	190	180	160	160
8. Logs for sawing.	100	75	65	60	60	55	50

USES: 1. Heavy structural work, bridges and wharfing timber (specially for fenders and in contact with sea) : house posts.

2. A good building timber especially for window and door frames and flooring.

3. A strong building timber especially for posts, beams and roofing, but cannot be painted as oil may subsequently exude from the surface. A very hard wearing timber suitable for temporary revetting but not permanently durable in contact with ground unless treated. Absorbs preservatives easily.

4. Light constructional timber for housing, door, panelling and cladding. Used also for furniture and fixtures.

5. All temporary light constructional work and especially for shuttering and casing.

PRODUCTION

APPENDIX "J"

Summary of Imports of Sawn Timber by Species and Country of Origin, 1971

(in tons of 50 cubic feet)

Species	Sarawak
Alan	28.87
Kapur	3.47
Belian	62.21
Selangan Batu	2.10
Total	96.65

Declared value — \$21,969

PRODUCTION

APPENDIX "K" Summary of Exports of Sawn Timber by Species and Countries of Destinations, 1971 (in tons of 50 cubic feet)

Species	Sarawak	Sabah	United Kingdom	West Germany	Total
Meranti	20.80	7.30	—	—	28.10
Keruing	5.00	8.85	—	—	13.85
Ramin	59.23	—	346.32	543.88	949.43
Kempas	—	3.47	—	—	3.47
Total	85.03	19.62	346.32	543.88	994.85

Declared value = \$211,703.

CHARCOAL: 1,104 piculs of charcoal were exported to Sarawak.

Declared value = \$9,936.

JELUTONG: 1,505 piculs of Jelutong were exported to Singapore.

Declared value = \$134,864.

(1 picul = 133 lbs.).

PRODUCTION

APPENDIX "L" Statement of Revenue in Dollars by District, 1971

District	Timber and Poles	Firewood & Charcoal	Minor Forest Produce Jelutong	Others	Compensation and Fines	Other Sources	Total
Brunei	79,183	3,565	3,246	29	3,426	661	90,110
Belait	296,843	57	6,598	380	2,663	2,999	309,540
Total	\$376,026	3,622	9,844	409	6,089	3,660	\$399,650

PRODUCTION

APPENDIX "M" Summary Statement in Dollars of Revenue and Expenditure 1971

REVENUE	EXPENDITURE	
	(a) Recurrent:	
1. Timber and Poles	\$376,026 (\$375,475)	\$362,748 (\$327,377)
2. Minor Forest Produce	13,875 (\$ 13,949)	54,052 (\$ 55,208)
3. Other Sources	9,749 (\$ 9,227)	10,301 (\$ 8,348)
	<u>\$399,650 (\$398,651)</u>	<u>6,770 (\$ 9,884)</u>
		<u>\$433,871 (\$400,817)</u>
	(b) Development:	
	Silviculture	26,666 (\$ 9,507)
		24,755 (\$ 30,528)
	<u>\$485,292 (\$440,852)</u>	<u>\$485,292 (\$440,852)</u>
Balance being excess of Total Expenditure over Revenue	85,642 (\$ 42,201)	
	<u>\$485,292 (\$440,852)</u>	

PRODUCTION

		SITES		SPECIES														TOTAL
		Acacia auriculiformis	Metaleuca leucadendron	Cassia siamea	Eucalyptus spp.	Delonix regia	Fagraea fragrans	Casuarina nobilis	Spathodea campanulata	African Tulip Tree	Enterolobium saman	Pinus caribaea	Cassia fistula	Peltophorum pterocarpum	Yellow Flame	Callitris intratropica	Northern Cypress P.	
Anti-Planting	Berakas Camp	17,490	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17,490
	Labi Road	1,640	1,443	160	2,572	—	—	—	—	—	—	—	—	—	—	—	—	5,815
	Quarters Sungai Liang	130	—	—	86	—	12	—	—	—	—	—	—	—	—	—	—	228
SUB-TOTAL		19,260	1,443	160	2,658	—	12	—	—	—	—	—	—	—	—	—	—	23,533
Amenity Planting	Quarters Sungai Liang	—	—	—	—	3	—	—	—	—	—	—	—	10	—	—	—	13
	Balai Raya Sukang	—	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60
	Panaga	—	100	—	—	—	—	6	26	20	—	—	—	—	—	—	—	100
	Clinic Sungai Liang	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52
	School Tutong	257	—	83	—	91	—	—	33	25	—	—	—	95	—	39	623	
	Lapau	—	—	—	—	—	—	7	—	—	—	50	—	—	—	52	109	
	Trade School Kuala Belait	70	—	—	—	—	—	10	30	—	—	—	60	30	—	—	200	
	Istana	—	—	—	—	6	—	25	—	—	—	10	—	6	—	4	51	
	Quarters Lamunin	—	20	—	—	6	—	—	—	—	—	6	—	—	—	10	42	
	Churchill Memorial	—	—	—	—	—	—	11	—	—	—	—	—	—	—	10	21	
Fisheries Department	Muara Port Road	—	—	—	—	—	—	70	—	—	—	—	—	—	—	—	70	
	Gadong Road	30	50	—	—	—	—	25	—	—	—	—	—	—	—	8	113	
	Fisheries Department	2	10	—	—	—	—	—	—	—	—	—	—	—	—	—	12	
SUB-TOTAL		19,260	1,443	160	2,658	—	12	—	—	—	—	—	—	—	—	—	—	23,533
TOTAL		19,619	1,683	243	2,658	106	12	154	89	45	45	66	60	141	123	—	—	24,999

PRODUCTION

(c) Land Utilisation and Tenure

1. All land which has not been alienated is deemed to be State land. The present Land Code, which came into force in September 1909, provided for the registration of titles to land issued prior to its enactment and for the grant of titles thereafter by the Resident whose powers were transferred to the Sultan in Council when the present constitution was enacted in 1959. All such titles are registered in the five District Lands Offices in accordance with the principles of the Terrens system. They are subject to general conditions such as the fact that they convey a surface right only and that the Government reserves the right to all minerals, to remove earth, clay, gravel, etc. required for public purposes and to make roads and to lay pipe and telephone lines across the land. Special conditions, specifying how the land shall be used can be usually are endorsed on titles. If no special conditions are laid down the Code requires the land to be used solely for agricultural purposes. Special conditions can only be charged by approval of His Highness the Sultan-in-Council. Only token rents are charged, except in some commercial areas, and a small premium is charged if the land has road frontage and when there are unexhausted improvements on it.

2. Alienation of State land virtually ceased in 1954 when it was found that a considerable backlog of applications, covering the period 1936-54, had accumulated, which with the available staff would take many years to clear. A number of applications were cleared before it was decided not to proceed any further until development plans have been approved for the State. No appreciable grants of State land have been made since July 1967 when 77 land applications in Temburong District, made before 1955, were forwarded. The number of Brunei citizens and permanent residents have meanwhile greatly increased and there is naturally much landlessness among them. This land hunger and the lack of private land available for sale has led to a phenomenal increase in the price of private land.

3. Some 7500 acres (0.005% of the State Land) is occupied temporarily by the Brunei Shell Petroleum Company in Belait under their Petroleum Mining agreement with the Government. Sunray Borneo Oil Company Incorporation and Ashland Oil Company also have mining agreements with the Government. These cover the remainder of land acres of Brunei. It is estimated that about 3.82% of the area of the State has been alienated and this is made up, by districts, as follows:—

PRODUCTION

(a) District	(b) Area	(c) Area in Private Ownership	(d) (c) as a %age of (b)
Brunei/Muara	220.4	41.62	18.88
Tutong	450.4	17.68	3.92
Belait	1051.8	8.92	0.85
Temburong	503.4	16.77	3.33

(All areas given in square miles)

The total area in private ownership is steadily becoming less owing (i) to the terms of some titles expiring every year and the titles not being renewed and (ii) the Government resuming private land for public purposes.

4. An appreciable amount for farming of short-term crops, particularly rice, is done by holders of Temporary Occupation Licences. 1536 licences were granted for a total of 2592 acres, the comparative figures for 1970 are 1083 and 2592 respectively. Temporary Occupation Licences are also granted for the removal of stone, gravel, sand, etc. Income from fees, not including royalties for taking stone, etc. was \$83,464 as compared with \$10,855 during the previous year.

5. All mortgaging of land to non-citizens, leasing and transfers of land to non-citizens and changes of the tenure conditions imposed when land grants are made require the prior approval of His Highness the Sultan-in-Council. All mortgages registered so far have been to Banks, so require approval. There were 24 during the year as compared with 131 during 1970.

6. Acquisition of land for public purposes, mostly for development projects, continued to take up much of the time of the Lands Staff. Some ten pieces of private land were acquired during the year at a cost of \$223,325.58. Acquisition by agreement is very rarely possible and the procedure prescribed by the Land Acquisition Enactment, Cap. 41, is, of necessity, time and labour consuming.

7. At the beginning of the year the establishment of the Lands Department was increased from 39 to 72 as a consequence of the Department taking over from the District Administration Department the lands administration in Brunei/Muara, Belait, Tutong and Temburong Districts.

PRODUCTION

(d) Fisheries

Marine Fisheries Production

Brunei's marine fisheries have developed from simple enterprises using traditional gear and boats propelled by paddles producing an estimated 370 tons of fish annually only just over 20 years' ago to much more sophisticated semi-professional fisheries using more progressive fishing techniques in conjunction with boats powered by outboard engines and producing over 1600 tons of fish per year. Brunei's marine fisheries are believed to have now reached a stage where any further significant increases in fish landings will not be possible unless new fishing grounds are utilized by using new fishing methods and larger and more sea-worthy boats. At the same time the marketing system will have to be reorganized with the aim of guaranteeing the fishermen a steady worthwhile income and supplying the customers with good-quality fish at all times. A trawling survey carried out by the Fisheries Department three years ago indicated reasonably rich stocks of fish in the sea off Brunei and a detailed plan for modernizing the fisheries and the establishment of a marketing organization was worked out and is now being studied by Government.

The total recorded landings of fish and prawns in the State dropped from 2,204 short tons last year to 1,804 this year. Brunei fishermen accounted for only 62% of the total landings as compared with 79% last year, whilst Sabah's share increased from 12% to 24% and Sarawak's from 9% to 14%.

Prawns landings, on the other hand, increased by 161 short tons to a total of 463 short tons. Even so prawns were generally more expensive than last year with exception of the peak months of April, September, October and November. Fish prices also were generally higher than last year.

The mackerel *rumahan* (*Rastrelliger kanagurta*) was again the most common fish in the markets, whilst the herring *tamban*, which was caught in great quantities last year, was in very short supply.

The total market value of fish and prawns sold in the three markets of Brunei was \$3,383,031. Details of catches, their origin and value and of fishing gear licences can be found in tables I to V.

PRODUCTION

Freshwater Fishes

In its second year of operation, the Sungai Jambu Fish Farm became fully functional. A first series of experiments was concluded testing under local conditions mixed stocking with three non-competative species of fish. Grass Carp (*Ctenopharyngodon idellus*), Lampam Jawa (*Puntius gonionotus*) and Tilapia hybrids (*Tilapia hornorum* x *T. mossambica*) were reared in fertilized ponds without feeding or with the addition of small amounts of grass. Yields of between 500 and 900 lbs/acre p.a. were obtained.

Facilities and staff for hormone-induced breeding of grass carp not being available, the fry of this and the other Chinese carps has to be imported from Hongkong. The Tilapia, on the other hand, can easily be bred locally and the all-male hybrids of *Tilapia hornorum* x *Tilapia mossambica* reached a maximum length of 27.5 cm and a weight of 450 gr. in 6 months' time. This is only slightly less than a grass carp can obtain during the same length of time (in our experiments 29.6 cm and 340 gr), and the total yield of a pond stocked with Tilapia was, with 1200 lbs/acre p.a., higher than the yield of a pond with mixed stocking. Moreover, the Tilapia is a plankton feeder and, provided a good growth of plankton is assured by adding small amounts of fertilizer, no feeding is necessary. Further experiments will, therefore, concentrate on the possible improvement of the yield and size of Tilapia and the possibility of Tilapia culture with regular and continuous harvesting will be investigated.

During the year 6050 Tilapia hybrids were produced in our breeding ponds and 1750 of these were stocked to local fish ponds, whilst the rest was used for our own experiments. Lampam Jawa was also bred, but there was little demand for the fry. As fish culture is still in its infancy in Brunei the demand for fish fry in general is minimal. Although funds are now available for this Department to assist Farmers Associations in the setting up of their own fish ponds, unresolved questions of land leases have so far made any progress impossible.

A pilot scheme of uncontrolled breeding of several species of aquarium fishes in one of the Farm's $\frac{1}{4}$ acre ponds has shown the ease with which these fishes can be bred under local conditions and 1975 aquarium fish bred in this pond were sold during the year. Towards the end of the year a second pond was set aside for this purpose, providing for an increased interest in the aquarium hobby which can be expected once the Hassanal Bolkiah Aquarium has been opened.

PRODUCTION

An additional two acre pond, created by damming an unused section of the Fish Farm area, was stocked with surplus fry and, towards the end of the year, this pond was teaming with fish. The pond was then made accessible to fishing by the public as a recreational facility and limited numbers of fishing permits were issued. This new facility proved extremely popular and, from the opening date on 30th November to the end of the year, 196 permits were sold for \$2.00 each and an additional 549 persons asked to be entered in a waiting list for future issues of permits. 46 Grass Carp, 82 Lampam Jawa, 697 Tilapia and 6 Gouramis were caught by permit holders during the period mentioned.

Hassanal Bolkiah Aquarium

By the end of the year the Hassanal Bolkiah Aquarium was virtually completed and its opening can be expected early in 1972. The Aquarium is located in the new Churchill Memorial Building and is maintained by the Fisheries Department. At the end of the year there were in the Aquarium 959 specimens of fish in 99 different species. In addition there was one species of turtle with ten specimens and eight species of invertebrates with 14 specimens.

Administration

The permanent staff of the Fisheries Department increased from 19 in 1970 to 49 in 1971. All newly recruited staff was engaged in connection with the Aquarium.

PRODUCTION

TABLE I
Fish and Prawns available in the markets of the State in 1971
(WEIGHT IN LBS)

Months	B. S. Begawan (including Muara)	Seria	Kuala Belait
January	187,919	54,701	29,750
February	240,201	54,265	19,637
March	315,578	61,595	44,374
April	290,535	73,786	29,510
May	263,212	52,535	35,951
June	273,444	30,511	35,182
July	213,800	26,804	29,936
August	217,123	59,548	21,157
September	211,551	43,271	27,618
October	155,839	72,147	28,184
November	173,489	28,623	16,096
December	186,861	43,508	34,859
Total	2,729,552	601,294	352,254

Total for the State: 3,683,100 lbs — 1,841 short tons

PRODUCTION

TABLE II
Origin of Fish and Prawns available in the markets of the State
in 1971
(WEIGHT IN LBS)

Months	Brunei	Sarawak	Sabah	Singapore
January	142,585	39,130	89,567	1,088
February	134,901	66,442	111,953	807
March	222,170	64,359	134,724	294
April	272,971	49,669	71,191	—
May	252,981	44,111	54,606	—
June	246,859	33,706	58,572	—
July	189,979	36,064	44,497	—
August	182,306	45,781	69,119	622
September	182,957	31,219	67,201	1,063
October	154,790	38,654	62,726	—
November	126,542	28,037	62,963	666
December	170,070	40,300	54,858	—
Total	2,279,111	517,472	881,977	4,540

PRODUCTION

TABLE III

**Market Value of Fish and Prawns sold in the markets of the State
in 1971**

Months	B. S. Begawan	Muara	Seria	K. Belait
January	\$ 176,009.80	\$ 1,961.94	\$ 54,670.59	\$ 26,888.17
February	232,233.64	2,820.36	54,915.17	19,659.75
March	272,497.27	5,161.03	56,842.71	43,314.16
April	218,409.22	1,683.44	60,706.74	25,146.98
May	218,341.11	2,287.59	51,840.77	29,644.01
June	213,794.83	3,526.13	31,139.56	30,379.01
July	202,303.66	3,336.77	28,080.92	23,503.22
August	176,433.43	3,027.00	63,689.13	19,622.63
September	195,112.63	3,374.24	44,760.54	30,976.68
October	140,023.87	3,763.65	81,923.20	30,271.20
November	164,290.06	2,133.16	30,069.55	18,147.70
December	193,019.45	4,149.46	50,240.18	36,904.58
Total	\$2,402,468.97	\$37,224.77	\$608,879.60	\$334,458.09

Total for Brunei: B\$3,383,031.43

PRODUCTION

TABLE IV
Estimated Total of Fish Production in Brunei in 1971
(WEIGHT IN LBS)

	Fish	Prawns
All Recorded Markets	1,664,457	614,654
Tutong	33,259	—
Temburong	16,644	6,146
Subsistence Consumption	766,080	51,072
Freshwater Fisheries	110,745	—
Total	2,591,215	671,872

Estimated Total Production in Brunei: 3,263,087 lbs — 1,631 short tons.

PRODUCTION

TABLE V
Description and number of licenced fishing gear in 1971 and comparison with 1970

Name	Fishing Gear Description	B. S. Begawan and Tutong/Muara	Seria and Kuala Belait	Total	Increase + or Decrease on 1970
Lintau	Shoal water fish traps	50	—	50	3—
Pukat	Small hauling nets	7	8	15	8—
Kabat	Small fish traps	7	—	7	4+
Kilong	Deep water fish traps	49	—	49	8+
Rantau	Large drift nets	12	18	30	3—
Andang	Bottom set nets	164	15	179	20—
Selambau	Watched lift nets	1	—	1	—
Anchau	Similar to drag nets	2	—	2	—
Panau	Scoop nets	—	1	1	—
Rawai	Long lines	—	—	—	3—
Rambat	Casts nets	5	—	5	6—
Paguyot	Sea shore seine nets	1	—	1	2—
Pukat Rimau	Trawl nets	2	—	2	—
Tabeh	Small drag nets	2	—	2	—
Bubu	Sea fish traps	640	480	1,120	240+

PRODUCTION

(e) Geological Survey

The Geological Survey is a research organisation concerned with the location and evaluation of mineral deposits, including raw materials for the building industry and also carries out studies related to civil engineering. The department is financed under Head 18 as follows:

	Allocated	Expended
Personal Emolument	67,116.34	62,996.34
Recurrent Expenditure	32,930.00	22,912.13
Total Expenditure	100,046.34	85,908.47

Investigations during the year included the foundation conditions of two potential damsites on the Temburong River, the movement of beach sand which was monitored at ten points on the coast and tracer experiments in the Muara area. Additional data from boreholes drilled on the silica sand deposit at Tutong showed the presence of two paleosoles within the pedological succession. A geochemical prospecting programme was initiated in Temburong District and soil samples analysed for the trace amounts of mercury.

The first Brunei citizen to qualify as a geologist returned from the United Kingdom in August and commenced a study of foraminifera within the Tertiary-Recent sediments.

Exploitation of gravel from deposits in Temburong which were evaluated by the Geological Survey in 1967-68 continued on a large scale by Messrs Gammon South East Asia and Messrs Costain Civil Engineering. Total production by Gammon for the road project was 252,000 tons; this company also supplied 140,000 tons of crushed stone for the construction of the LNG plant at Lumut. Stone for the new airport is transported by barge from Temburong and a total of 380,000 tons of washed gravel have been used in its construction.

Brick production declined on the fall in demand as many development project were completed and there were only six kilns in operation.

CHAPTER 8

SOCIAL DEVELOPMENT

(a) Education **Introduction**

The first account of formal education in Brunei is given in the Annual Report for 1941 which states:

“There is a small Malay Vernacular school in Brunei Town with about 40 boys attending.”

The first Chinese-medium school was opened in 1916 and the first English-medium school, an Anglican S.P.G. Mission primary school, in 1931. The first Malay-medium school for girls was opened in 1930.

Statistics show that by 1941 on the eve of Japan's entry into the Second World War there were 24 Malay-medium schools in the State with a total enrolment of 1,746 pupils, including 312 girls. There were also 140 pupils in Mission English-medium schools and 274 pupils in Chinese-medium schools.

During the Japanese occupation of Brunei education suffered a setback. Most of the schools were closed and some of the school buildings were destroyed. Schools were, however, rapidly re-established after the war and by end of 1947 enrolment was up to the 1941 level. Continuous expansion since then brought total enrolment in all educational institutions in the State in 1971 up to 42,830, an increase of 2,701 over the enrolment of 40,129 in 1970.

The present educational system

Schools are classified according to their language of instruction: this being either Malay, English or Chinese (Mandarin). Malay-medium and English-medium schools work a 5-day week, Chinese-medium schools 5½-day week. The only teacher training institution, the Government-administered Brunei Teachers' College, and the two trades schools, also work a 5-day week. All educational institutions work a 3-term year commencing in January. The Government has decreed that Government-administered schools must be closed during the fasting month, Ramadhan, which, because it is subject to lunar reckoning, has different dates each year. The main annual school holiday is arranged to begin a few days before, and to end a few days after, Ramadhan. The structure of the educational system is shown diagrammatically in Appendix XVI.

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Statistics of pupils, student-teachers and teaching staff in 1971 are given in Appendices I to IX.

A survey carried out in 1969 showed a high incidence of repetition in Government schools and underlined the need to formulate rules to control repetition at all levels. The rules limit repetition to Malay primary standards IV and VI, English Preparatory III, and Malay or English secondary Forms III, V and Upper VI and only one repetition of any of these classes is permitted; except that further repetition of Form VI may be permitted in special circumstances. Promotion after a repeat year is automatic up to secondary Form III, but promotion to second Form IV and Form Lower VI depends on the pupils results in the Malaysian L.C.E. Examination and the Joint M.C.E./G.C.E. O level examination, respectively.

The present system is designed to allow the implementation of the Government aim to provide free primary and secondary education for all children in the State. Although there is a change in the language of instruction from Malay to English, for some pupils at secondary level, the syllabuses in all Government secondary schools have common content and they lead to examinations which are identical in subject and standard.

The Commission on Education, which started its work in 1970, continued its work in 1971. The Commission's report had not been published at the end of 1971.

Public Examinations

Pupils in secondary schools sat for the following public examinations in 1971:

- (i) The Malaysian Lower Certificate of Education (L.C.E.), in either the Malay or the English medium. This Examination is taken after three years of secondary education.
- (ii) The Joint Examination for the Malaysia Certificate of Education (M.C.E.) and the General Certificate of Education (M.C.E.) and the General Certificate of Education (G.C.E.) O Level in either the Malay or English medium. This Examination is taken after five years of secondary education.
- (iii) The Joint Examination for the Cambridge Higher School Certificate (H.S.C.) and General Certificate of Education (G.C.E.) A Level in either the Malay or English medium.

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The Examinations Section took over the administration of the following examinations:—

- (i) English School Entrance Examination. This Examination is taken by pupils in Standard IV in Malay-medium and Chinese-medium schools.
- (ii) Standard VI Examination. This Examination is taken by pupils in Standard VI in Malay-medium schools.
- (iii) The Primary Certificate of Education of Examination. This Examination is taken by pupils in Primary Standard VI in Mission schools and pupils in Preparatory Form III in Government English-medium schools.

Formerly, (i) and (ii) were administered by the Malay Section of the Department and (iii) was administered by the English Section.

The Examinations Sections also supervised examinations in Brunei for other examining bodies, including the Royal Society of Arts, London Chamber of Commerce and the City and Guilds of London Institute.

Statistics of public examination results in 1971 are given in Appendix X.

Malay Medium Education

All Malay-medium schools are Government-administered and all, except for one primary school, are co-educational. The one exception is the Sekolah Melayu Raja Isteri Fatimah in Bandar Seri Begawan. It is for girls only.

The primary course in Malay-medium schools is of six years duration (Standards I to VI).

Selection is made by examination at the end of the Standard IV year for entry into the preparatory sections of Government English-medium schools, where pupils follow a three-year course to prepare them for entry to the school's secondary section.

Not all Malay-medium primary schools extend to Standard VI. The pupils who have completed Standard IV in some small rural primary schools are sent to larger primary schools which are within walking distance; and pupils from rural schools which extend to Standard V only are transferred for their final primary year to a central primary school in an urban or semi-urban area. Pupils in the latter group are given free daily transport or a subsistence allowance of \$45/- a month during term-time. Of the 102 Malay-medium primary schools in 1971, 55 extended to Standard VI, 36 to Standard V only, and the remainder (11 schools) had not yet developed to Standard V.

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There were six Malay-medium secondary schools in 1971. Their full names are given here together with their commonly used abbreviations and, in the right hand column, the highest class in each case:

- | | |
|---|----------|
| 1. Maktab Melayu Paduka Seri Begawan Sultan,
Jalan Muara (M.M.P.S.B.S.) | Upper VI |
| 2. Sekolah Menengah Melayu Sultan Muhammad
Jamalul Alam, Bandar Seri Begawan
(S.M.M.S.M.J.A.) | Form III |
| 3. Sekolah Menengah Melayu Muda Hashim,
Tutong (S.M.M.M.H.) | Form III |
| 4. Sekolah Menengah Melayu Muhammad Alam,
Seria (S.M.M.M.A.) | Form III |
| 5. Sekolah Menengah Melayu Ahmad Tajuddin,
Kuala Belait (S.M.M.A.T.) | Form III |
| 6. Sekolah Menengah Melayu Sultan Hasan,
Bangar (S.M.M.S.H.) | Form III |

Schools 2 to 6 came into existence several years ago as offshoots of M.M.P.S.B.S. (formerly known as S.M.M.P.). The Principal of M.M.P.S.B.S. was responsible for the supply of materials and textbooks to the schools, as well as for providing professional guidance and supervision. By 1971, however, the schools had developed to such a degree that school heads were given full responsibility for all aspects of administration including the purchase of school materials from approved suppliers.

Malay-medium primary education

The total enrolment in Government Malay-medium primary schools in 1971 was 16,569. The following is a comparative table of enrolment for the years 1967 to 1971:

Total enrolment in Malay primary schools.

Year	Boys	Girls	Total
1967	8,545	8,085	16,630
1968	8,317	7,877	16,194
1969	8,192	7,887	16,079
1970	8,106	7,613	15,719
1971	8,672	7,897	16,569

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The table shows a decline in total enrolment from 1967 to 1970. This decline can be ascribed to several factors: the progressive advance towards full primary enrolment, an increasing proportion of transfers to English-medium preparatory schools after Standard IV and the reduced repetition of classes following the new rules on repetition which became effective in 1970.

The 1971 enrolment shows an upward trend, this being due to the fact that in January 1971 the decision, made in 1970, to lower the age of admission to school from $5\frac{1}{2}$ years to 5 years, became operative. Thus, in 1971, all children who had attained their fifth birthday before 1st January, 1971, were admitted, the total being 4,202.

Successive intakes to Malay-medium primary schools are tabulated below. It should be noted, however, that the large increase of the 1971 intake over the 1970 intake is mainly due to the fact that the former consists of the children born over a period of one and a half years.

Year	Boys	Girls	Total
1961	91	244	335
1962	91	249	340
1963	185	215	400
1964	127	273	400
1965	414	463	877
1966	381	416	797
1967	465	535	1,000
1968	782	783	1,565
1969	1,091	1,146	2,237
1970	1,162	1,110	2,272
1971	2,211	1,991	4,202

It is expected that future Standard I intakes will be a close reflection of the number of births five years earlier, because the number of average children available for admission is now statistically insignificant and the former reluctance to send girls to school has completely disappeared.

Malay-medium primary schools are organised on a district basis, each district being administered by an officer with the designation Inspector of Malay Schools. In 1971 there were seven such districts, their names and the number of schools in

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each, being:

Brunei I	—	8 schools
Brunei II	—	22 schools
Brunei III	—	15 schools
Tutong I	—	12 schools
Tutong II	—	18 schools
Belait	—	12 schools
Temburong	—	15 schools
Total	—	102 schools

No new Malay-medium schools were opened in 1971 but at the end of the year the villagers of Kampong Tungku and Kampong Tamoi were building temporary schools by community effort. These are expected to open in 1972.

Many of the existing rural Malay-medium primary schools are still in makeshift accommodation constructed by the villagers. These will be replaced by permanent buildings as circumstances permit. In 1971 the following new schools and additions to existing permanent schools, were completed:

- (1) A new school at Gadong, consisting of 16 classrooms and hall and kitchen.
- (2) A new school at Bukit Panggal, Tutong I, consisting of five classrooms, hall and kitchen, and three houses.
- (3) A new school at Bakiau, Tutong I, consisting of five classrooms, hall and kitchen, and three houses.
- (4) A new school at Bukit Sawat, Belait, consisting of six classrooms and four houses.
- (5) Additions to the Danau School, consisting of three classrooms, hall and kitchen, and two houses.
- (6) Additions to the Baru-Baru schools, consisting of two classrooms, hall and kitchen, and two houses.
- (7) Additions to the Batu Apoi School, consisting of three classrooms, hall and kitchen, and two houses.
- (8) Additions to the Dato Gandhi School, consisting of hall and kitchen.

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In Seria 24 flats for teachers were completed and occupied before end of the year.

For the first time ever, all Malay primary schools were adequately staffed with trained teachers in 1971. This resulted from the successful conclusion of the crash-programme of teacher training which was devised in 1966 with the object of training the 400 untrained probationer teachers who were employed in Malay primary schools at that time. The training consisted of a two-year course. During the first year the probationer teachers worked full-time in the Malay primary schools in the mornings, and in the afternoons they attended lectures in the Teachers' Training College; during the second year they were in full-time attendance at the college. The teacher-training programme is now arranged in such a way that the need to employ untrained teachers in primary schools should not arise in future.

As was stated above, many of the rural primary schools are in makeshift accommodation constructed by the villagers. The houses for the teachers of these schools were also built by the villagers. Both houses and schools lack the basic amenities which teachers are accustomed to in the towns and this, to some extent, explains the marked reluctance on the part of some teachers to serve in rural areas. This reluctance made it necessary to prescribe that all young teachers must serve a specific period in rural schools. Conditions for the teachers in rural areas are however improving: roads have been built to villages which were accessible in the past only by river, and roads to other isolated villages are planned. Roads will make it easier to build permanent schools in these villages, and also make it possible to provide piped water and electricity in the course of time.

A total of 46 teachers serving in the most isolated rural schools — Amo, Kinua, Benutan, Kampong Bukit, Panchong, Supon, Belabau, Biang Tengah, Selangan, Nagalang, Semabat, Melilas, Sukang and Meranking—received an Isolation Allowance of \$30.00 a month to compensate for the higher cost of living in these rural areas.

Despite the fact that the 1971 enrolment in Malay-medium primary schools was slightly less than the 1967 enrolment, problems of overcrowding were experienced in 11 schools. A system of double sessions was operated in these schools.

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Good attendance in Malay-medium primary schools is a pleasing feature of the Brunei educational scene. The monthly percentage attendance in all Malay-medium primary schools in 1971 — excluding November, when all schools were closed for the long fasting-month holiday — was:

January	—	97.38	July	—	96.71
February	—	97.01	August	—	96.89
March	—	96.87	September	—	97.23
April	—	98.31	October	—	97.98
May	—	96.78	November	—	—
June	—	97.33	December	—	97.31

A total of 1973 pupils from Malay-medium primary schools was selected on the results of the English School Entrance Examination for entry into English-medium Preparatory I in 1972.

During the year the Physical Education Section of the Department arranged and supervised an extensive programme of inter-school competitions. This included cross-country running, athletics, football, hockey, badminton, volleyball, sepak takraw, netball and swimming. These competitions start in the schools, where school teams then compete against other schools from the same school District. District representatives are selected and they meet representatives from other districts in the State finals, which are usually held in the capital, Bandar Seri Begawan.

As in previous years Education Days were held during June. On Education Day parents, and other adults who live in the vicinity of the school, are invited to come to the school to see the work being done and to meet the school staff. Each school sets its own date for Education Day but before the State-wide Education Day programme begins, it has become the custom to hold an inaugural ceremony in Bandar Seri Begawan. The Deputy Menteri Besar officiated at the ceremony which was held on the 10th June, 1971. Afterwards, he and many invited guests, saw groups of pupils performing colourful mass drills and dances. Records show that 28,207 persons visited schools on Education Days in 1971 as compared with 24,650 in 1970.

Two of the new Malay primary schools were officially opened in 1971: The Dato Mahawangsa Malay School was opened by Yang Amat Mulia Pengiran Depa Negara, the State Secretary, on the 27th June, 1971, and the Orang Kaya Pemancha Berandai Malay School, Bukit Sawat, was opened by Yang Amat Mulia Pengiran Jaya Negara on the 28th August, 1971.

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Malay-medium secondary education

There was a slight increase in the enrolment in Malay-medium secondary schools in 1971: a total of 4,569 as compared with 4,487 in 1970.

There were six Malay-medium secondary schools in 1971; one of them (Maktab Melayu Paduka Seri Begawan Sultan, Jalan Muara) extended to Form VI, and the other five to Form III only. Pupils from these five schools who wish to continue their education beyond Form III can transfer to Form IV in M.M.P.S.B.S. if they pass the Malay-medium Lower Certificate of Education.

No new teaching accommodation was provided in 1971 but hostel accommodation for boys and girls was completed at Sekolah Menengah Melayu Sultan Hasan, Bangar, at Sekolah Melayu Pesar Ulak and at the M.M.P.S.B.S., Jalan Muara. Hostel accommodation is provided free to pupils from rural areas.

The Sekolah Menengah Melayu Muda Hashim, Tutong, moved into the premises which had been occupied by the Tutong English School, the Tutong English School having moved into its own new buildings across the road.

While the M.M.P.S.B.S. and the S.M.M.M.H., Tutong, are now in good accommodation and enjoy up-to-date amenities, the other four Malay-medium secondary schools are in sub-standard accommodation built for primary classes. The shortage of adequate laboratories is a serious problem but there are plans to provide these in the near future.

Probably the most intractable problem faced by Malay secondary schools is the shortage of qualified staff for senior secondary classes. The staffing of all Malay-medium secondary classes has improved because of the improved qualifications of locally-trained teachers but efforts to recruit graduates who can teach in the Malay-medium at senior secondary level have not been successful. The arrival of ten more Malay teachers from Singapore in 1971 — bringing the total number of teachers seconded from Singapore to 20 — helped considerably as did the decision of two local graduates to enter the teaching profession. Both these graduates were posted to M.M.P.S.B.S. where one of them teaches Mathematics and the other teaches Science.

A significant event in 1971 was the official opening, on the 23rd September of the new Malay Secondary School, Jalan Muara. It is named after the former Sultan, Duli Yang Teramat Mulia Paduka Seri Begawan Sultan, who officiated at a very impressive ceremony.

English-medium education

English-medium schools in Brunei are either administered by Government or by Missions or other private organisations. Government English-medium schools are fully aided. The others receive no financial assistance from the Government.

The Government English-medium schools offer a three-year preparatory course leading to secondary courses of either three years up to Malaysian L.C.E. or five years up to Malaysian Certificate of Education/G.C.E. O Level, or seven years up to Cambridge Higher School Certificate/G.C.E. A Level. Preparatory classes are designated Prep. I, II and III; secondary classes are designated Forms I, II, III, IV, V, Lower VI and Upper VI.

Mission and other unassisted English-medium primary schools offer a six-year primary course (Standard I to VI) while at secondary level the pattern is the same as for Government English-medium schools. One Mission school extended to Form Upper VI.

Government English-medium schools

In 1971 preparatory courses were available in Anthony Abell College, Seria, in the Perdana Wazir English School, Kuala Belait, in the Tutong English School, and in the Brunei Preparatory School and its annexes in some Malay primary schools. The first three schools had secondary departments, but the Brunei Preparatory School operated independently as a preparatory school. Its principal was also responsible for the supervision of the preparatory classes in the following Malay schools: S.M. Muara, S.M. Amar Pahlawan, S.M. Anggerek Desa, S.M. Sengkurong, S.M. Kilanas, S.M. Sultan Hasan, Bangar, S.M. Pengkalan Batu, S.M. Lambak and S.M. Sungai Hanching.

The total enrolment in preparatory classes in 1971 was 5,666. Of this total 3,925 were enrolled in the Brunei Preparatory School and its annexes in the Malay primary schools referred to in the previous paragraph.

One new English-medium secondary school was opened in 1971 in the premises vacated by the Teachers' Training College. The school, designated the Berakas English School, is at the junction of the Berakas and Muara roads. It opened with Form I and Form II pupils who had previously been enrolled in Sultan Omar Ali Saifuddin College, Bandar Seri Begawan, and Sekolah Tinggi Perempuan Raja Isteri, Bandar Seri Begawan. The opening of this school raised the number of Government English-medium secondary schools to six, the other five being:

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Sultan Omar Ali Saifuddin College (S.O.A.S. College),
Bandar Seri Begawan.

Sekolah Tinggi Perempuan Raja Isteri (S.T.P.R.I.), Bandar
Seri Begawan.

Tutong English School (T.E.S.), Tutong.
Anthony Abell College (A.A.C.), Seria.
Perdana Wazir English School (P.W.E.S.), Kuala Belait.

The total enrolment in English-medium secondary schools in 1971 was 4115.

The continuing expansion of English-medium education is illustrated by the following comparative table which shows the increases in enrolment at both preparatory and secondary levels in 1971 over the figures for 1970, expressed both numerically and as percentages. The increases in 1970 over 1969 are appended for comparison.

TOTAL ENROLMENT

	Preparatory			Secondary			Total		
	B.	G.	T.	B.	G.	T.	B.	G.	T.
1970	2517	2411	4928	1864	1414	3278	4381	3825	8206
1971	2825	2841	5666	2247	1868	4115	5072	4709	9781
Increase	308	430	738	383	454	837	691	884	1585
% Increase	12.2	17.8	14.9	20.5	32.1	25.6	15.8	23.1	19.3

INCREASES IN 1970 OVER 1969 ENROLMENT

	Preparatory			Secondary			Total		
	B.	G.	T.	B.	G.	T.	B.	G.	T.
Increase	332	376	708	245	307	552	557	683	1260
% Increase	15.2	13.6	16.8	15.1	27.7	20.2	15.2	21.7	18.1

As will be seen from the above table the increase in 1971 at preparatory level, compared with the 1970 increase, was slight, but there is a more significant increase at secondary level. The total percentage increase at preparatory level was lower and the percentage increase at secondary level was slightly higher. The percentage of girls in the preparatory enrolment in 1971 was just over 50 compared with 48.9 in 1970, and in the secondary enrolment 45.4 as compared with 43.1 in 1970.

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Accommodation for these increasing numbers presented a problem but was eased by the completion of a new 12-classroom block for S.T.P.R.I. and the new 36-classroom accommodation for the Tutong English School. It was still necessary, however, to have double sessions in the Brunei Preparatory School, in S.T.P.R.I. and in A.A.C., Seria.

The new girls' hostel at A.A.C., Seria, and the new girls' and boys' hostels at P.W.E.S., Kuala Belait, remained unopened in 1971. They cannot be opened until the new sewerage schemes in Seria and Kuala Belait are completed. At S.T.P.R.I., a new hostel for 100 girls was completed and brought into use.

Some 20 new contract teachers joined the staff of the Government English schools in the course of the year and there were a few departures on termination of appointment. On the basis of approved establishment figures there were 5 vacancies for teachers qualifying for the higher grade of Education Officer and 16 vacancies at the end of the year for honours or pass graduate teachers or non-graduate teachers with School Certificate/G.C.E. O Level qualifications or equivalent. Applicants from Malaysia and Singapore were interviewed during September and 20 recommendations for appointment to English schools were forwarded to the Public Service Commission. Eight applicants who were interviewed in Brunei were also recommended for appointment. Three applicants were recommended for Education Officer posts. One of these arrived before the end of the year.

Teaching-staff shortages were offset by the use of third-year trainees from the Teachers' Training College who were posted to schools for full-time teaching practice. Ten trainees were sent to junior secondary schools and 42 to the Brunei Preparatory School. Four new V.S.O. officers, one man and three girls, arrived later in the year.

A total of 2,034 pupils (1980 from Malay primary schools and 61 from Chinese primary schools) were selected for entry into English Preparatory Form I in 1972.

Mission English-medium schools

There were no additions to Mission English-medium schools in 1969. All seven Mission institutions continued to run kindergarten, primary and secondary sections. Five of the institutions are co-educational: St. George's and St. Andrew's, Bandar Seri Begawan; St. Margaret's, Seria; St. James's and St. John's, Kuala Belait. St. Michael's, Seria, has boys only up to Form V but has some girls in Form VI. St. Angela's, Seria, is for girls only.

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St. John's and St. James's extended to secondary Form III only in 1971; St. Andrew's, St. George's, St. Margaret's and St. Angela's extended to Form V; and St. Michael's extended to Form VI.

Total Mission enrolment increased from 5,694 in 1970 to 6710 in 1971.

Other Unassisted English-medium schools

The Brunei Shell Petroleum Company's primary school at Panaga had an enrolment of 190 in 1971. The school is for the children of the Company's senior staff and it offers primary courses through both the medium of English and through the medium of Dutch. The Borneo Chartered Institute, Kuala Belait, which was referred to in previous reports is no longer in existence.

Chinese-medium education

Chinese-medium schools do not now receive financial aid from Government, the remaining item of aid — the payment of part-time teachers of Malay language — having ceased at the end of 1970.

The number of Chinese-medium schools remained at eight. Six of the eight schools ran kindergarten classes, all of them had full primary sections, one extended to Junior Middle III and two to Senior Middle III.

Total enrolment in the eight schools increased by just a little over 3%, from 5,232 to 5,406, this increase being about the same as that for 1970 over 1969. 61 pupils were selected for entry into Preparatory I in Government English-medium schools in 1972.

Fifteen Senior Middle leavers gained admission in 1971 to various universities and colleges in Taiwan, Singapore and Hong Kong. Two girls went to England to be trained as nurses. Five graduates returned to Brunei after completing their studies overseas.

Technical education

There are two trades schools: the Building Trades School, Jalan Muara (about five miles from Bandar Seri Begawan) and the Engineering Trades School in Kuala Belait.

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The two schools are housed in new modern buildings. The first students were admitted in September, 1971. Students are selected from applicants who have completed three years of secondary education and have passed some subjects in the Lower Certificate of Education examination, preference being given to those with passes in Mathematics and Science. The courses in both schools are based on the City and Guilds of London Institute's syllabuses.

During 1971 eight additional instructors were appointed. The enrolment in the Building Trades Schools was 90 and in the Engineering Trades School 60.

Carpentry and joinery, brickwork, and painting and decorating were offered in the Building Trades School and a course in plumbing was scheduled to begin in 1972. All the students in the Engineering Trades School followed the first-year general engineering course in preparation for later specialisation in milling and turning, welding and fabrication, electrical installation, and motor vehicle work.

The schools were built to provide workshop and hostel accommodation for a total of 816 students (528 in the Building Trades School and 288 in the Engineering Trades School). It is hoped to build up to maximum capacity in three years but the realisation of this hope will depend to a great extent on the success of efforts to recruit the required number of qualified instructors.

The Brunei Shell Petroleum Company continued to run its Artisan Training Centre in Seria during 1971. A total of 142 trainees were taking a three-year course leading to the City and Guilds of London Institute's Course 833 (Basic Engineering Trades) examination.

Teacher Training

The only teacher-training institution in the State is the co-educational Government-administered Brunei Teachers' College. The College vacated its temporary accommodation at Berakas and moved into its new premises at Gadong on 1st April, 1971. His Highness the Sultan has graciously agreed to give his name to the College which will henceforth be known as: Sultan Hassanal Bolkiah Teachers' Training College. An inaugural ceremony, at which His Highness will officiate, is scheduled to be held at the beginning of 1972.

The new College complex consists of the following accommodation:

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- (a) Thirteen lecture rooms, two science laboratories, two home science rooms, a language laboratory, an audio-visual room, a library, a geography room, one art and crafts room, a staff lounge and administrative offices.
- (b) An auditorium to seat 500, with stage, basement store rooms, changing rooms, toilets and a canteen.
- (c) A modern well-equipped gymnasium with toilets and changing rooms.
- (d) Two residential halls for students, providing comfortable, cubicle-type accommodation for 200 male students and 200 female students; a spacious dining hall with an attached modern kitchen; two common rooms, laundry rooms, two sick bays, a dental clinic, toilets with modern sanitation, and store rooms.
- (e) A surau for the use of Muslim students.
- (f) A turfed playing field with a standard-size running track.
- (g) A Malay primary school (the Gadong Malay School).

In 1971 the enrolment was 328: 186 male students and 142 female students.

In 1971 students admitted to the College were required to have the Cambridge School Certificate, the Malaysian Certificate of Education or G.C.E. O Level passes in at least four subjects. The College courses are devised to meet the need for general-purpose teachers for Malay primary schools and English preparatory schools, and also to train teachers for lower secondary schools.

The future of the College is envisaged as a single integrated institution for the training of teachers for both Malay-medium and English-medium schools, and for providing in-service courses for serving teachers to give them an opportunity to become familiar with the latest developments in teaching methods and techniques. It is also intended to serve as a centre for educational conferences and seminars organised by the Education Department.

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An in-service course on the teaching of English was held in the College from the 2nd to the 29th August, 1971. The course was organised by a specialist who came to Brunei under the auspices of the British Council. Fifty teachers attended the course. Introductory courses on the teaching of New Mathematics in primary schools were also held. It is hoped that in due course the College will be equipped to provide refresher courses for specialist teachers.

The school feeding scheme

All pupils in Government schools continued to receive a free rice meal each school working-day in rural areas and free snacks and drinks in urban areas.

Rice meals consisted of rice with curried meat, fish or eggs, and local vegetables. Meat was either buffalo meat, beef or chicken, and fish included sardines, salted fish and prawns, as well as white fish. Fresh apples, oranges or bananas are included in the menu at least twice a week. The cost of a full meal varied from 50 cents to 60 cents per pupil, depending on the degree of accessibility of the school.

In urban schools hot drinks were served together with biscuits or cakes. Fresh fruit was provided, usually twice a week. The average cost was 20 cents per pupil per day.

Internal scholarships

All Brunei pupils in Government schools receive tuition free of charge, which includes provision of all school materials, except for exercise-books for Malay-medium primary schools. Pupils whose homes are more than three miles from their schools are given full board and lodgings in a school hostel or a subsistence allowances of \$45.00 per month during term-time or free daily transport to and from school. Hostel boarders are transported free of charge between home and school at the beginning and end of each term. All Brunei pupils in Form VI, whether boarders in a hostel or day-pupils living within or day pupils living within or beyond the three-mile limit receive an allowance of \$25.00 a month during term-time in addition to any other maintenance or transport assistance.

In 1971 eight new hostels were completed and opened. They are:

SOCIAL DEVELOPMENT

- (a) A boys' hostel at Maktab Melayu Paduka Seri Begawan Sultan with accommodation for 600 boys.
- (b) A girls' hostel at Maktab Melayu Paduka Seri Begawan Sultan with accommodation for 400 girls.
- (c) A boys' hostel at Pesar Ulak for 150 boys.
- (d) A girls' hostel at Pesar Ulak for 150 girls.
- (e) A boys' hostel at the Tutong English School with accommodation for 200 boys.
- (f) A girls' hostel at the Tutong English School with accommodation for 200.
- (g) A hostel for 100 girls at S.T.P.R.I.
- (h) A hostel for 288 students at the Engineering Trades School, Kuala Belait.

Four more hostels were completed but not opened: one at the Building Trades School, Jalan Muara; one at A.A.C., Seria (for girls) and two at Perdana Wazir English School, Kuala Belait (one for boys and one for girls). The Building Trades School hostel is expected to open at the beginning of 1972 but the other three cannot be opened until the new sewerage schemes in Seria and Kuala Belait, to which they are linked, have been completed.

Applications for hostel places, subsistence allowance and free transport are considered before the opening of each school year by a Scholarship Committee under the Chairmanship of the Director of Education. This Committee also considers applications for admission to Government English-medium secondary schools from Mission school pupils. Successful applicants who are not Brunei nationals are required to pay fees.

As in previous years the Brunei Shell Petroleum Company continued to award bursaries to necessitous pupils in Government and Mission secondary schools. In 1971 20 new bursaries were awarded by the Company, fifteen for M.C.E./G.C.E. O Level courses and five for H.S.C./G.C.E. A Level courses; and thirteen previous M.C.E./G.C.E. O Level awards and two H.S.C./G.C.E. A Level awards were renewed. All of these bursaries were to the value of \$500.00 per annum.

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External scholarships

Full particulars of Brunei students studying overseas in 1971, including the subjects being studied and the level of the course, and showing Government and non-Government scholarship-students separately, are given in Appendix XI. Recommendations to Government for the award of overseas scholarships is a responsibility of the Scholarship Committee.

Adult education

Statistics of adult education classes in both the Malay and the English medium in 1971 are given in Appendix XII.

The total enrolment in Malay-medium and English-medium adult classes increased from 6475 in 1970 to 6,848 in 1971. Three new centres were opened in 1971 bringing the total number of adult educational centres up to 22.

The following comparative table shows enrolments in adult education classes in the years 1968 to 1971:—

Year	Malay Medium			English Medium			Total
	M	F	T	M	F	T	
1968	2301	2552	4853	1051	443	1534	6387
1969	2047	2575	4622	1135	560	1695	6317
1970	1530	3116	4646	894	935	1829	6475
1971	1452	3339	4791	1211	846	2057	6848

It will be seen that following the slight drop in enrolment in 1969, there was a slight increase in 1970 followed by slightly bigger increase in 1971.

Literacy classes were offered in all centres and in the urban centres classes in all school subjects up to Form VI level, and in both the Malay and English medium, were provided. Classes in domestic science and commercial subjects were particularly popular.

Registration and tuition fees were charged for the first time in 1971 for all classes except literacy classes. A total of \$36,536 was collected.

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The Adult Education Section published two issues of a magazine for adult education students. The first was published in April and 1500 copies were printed and sold to students at 50 cents a copy. The second was published in October. 1700 copies were printed and sold.

A typing and shorthand competition was held on the 30th May in the auditorium of the Language and Literature Bureau. 422 persons took part. A very successful Domestic Science Exhibition was held in the Pular Ulak Malay School. The Exhibition, which showed the work of the students in the domestic science classes, had about 2,400 exhibits.

In previous years the provision of Malay language teachers for unassisted schools was the responsibility of the Adult Education Section, but in 1971 these schools were required to recruit their own Malay language teachers. There were 21 teachers of Malay language in Chinese schools and 31 in Mission schools.

APPENDIX I
EDUCATIONAL STATISTICS, 1971
Schools Enrolment and Staff, April, 1971

Schools, April, 1971

Type of School/College	Government			Non-Government			Total		
	Boys	Girls	Coed	Total	Boys	Girls	Coed	Total	Total
Kindergarten ...	—	—	—	—	1	1	12	14	14
Primary/Preparatory ...	—	1	114	115	1	1	14	16	131
Secondary ...	—	1	11	12	—	1	9	10	22
Vocational ...	—	—	—	—	1	—	—	1	1
Technical ...	2	—	—	2	—	—	—	—	2
Teacher Training ...	—	—	1	1	—	—	—	—	1
Higher Education ...	—	—	—	—	—	—	—	—	—
Total ...	2	2	126	130	3	3	35	41	171

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APPENDIX I

Pupils and Students, April, 1971

Type of School/College	Boys	Girls	Total
GOVERNMENT			
Malay Primary	8,672	7,897	16,569
English Preparatory	2,825	2,841	5,666
Malay Secondary	2,394	2,175	4,569
English Secondary	2,247	1,868	4,115
Technical	111	—	111
Teacher Training	186	142	328
Higher Education	—	—	—
Total	16,435	14,923	31,358
NON-GOVERNMENT			
Kindergarten	638	563	1,201
Primary	4,150	3,307	7,457
Secondary	1,468	1,210	2,678
Vocational	115	—	115
Teacher Training	—	—	—
Higher Education	—	—	—
Total	6,371	5,080	11,451
Grand Total	22,806	20,003	42,809

APPENDIX I

Teachers, April, 1971

Type of School/Collge		Government			Non-Government			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Kindergarten	...	—	—	—	2	36	38	2	36	38
Primary/Preparatory	...	757	411	1,168	48	190	238	805	601	1,406
Secondary	...	365	117	482	89	58	147	454	175	629
Vocational	...	—	—	—	10	—	10	10	—	10
Technical	...	19	—	19	—	—	—	19	—	19
Teacher Training	...	11	6	17	—	—	—	11	6	17
Higher Education	...	—	—	—	—	—	—	—	—	—
Total	1,152	534	1,686	149	284	433	1,301	818	2,119

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APPENDIX II Analysis of School Statistics, April, 1971

Type of School/College	No. of Schools/Colleges	No. of Pupils		No. of Teachers		
		Boys	Girls	Total	Male	Female
Kindergarten						
(a) Mission	7	209	179	388	2	14
(b) Chinese	6	415	368	783	—	20
(c) Other	1	14	16	30	—	2
Total	14	638	563	1,201	2	36
Primary/Preparatory						
(a) Government Malay	102	8,672	7,897	16,569	624	299
(b) Government English	13	2,825	2,841	5,666	133	112
(c) Mission	7	1,821	1,400	3,221	9	85
(d) Chinese	8	2,229	1,817	4,046	38	92
(e) Other	1	100	90	190	1	13
Total	131	15,647	14,045	29,692	805	601
Secondary						
(a) Government Malay	6	2,394	2,175	4,569	241	39
(b) Government English	6	2,247	1,868	4,115	124	78
(c) Mission	7	1,114	987	2,101	54	47
(d) Chinese	3	354	223	577	35	11
(e) Other	—	—	—	—	—	—
Total	22	6,109	5,253	11,362	454	175
Vocational						
Other	1	115	—	115	10	—
Technical						
Government Trade Schools	2	111	—	111	19	—
Teacher Training						
Government	1	186	142	328	11	6
Grand Total	171	22,806	20,003	42,809	1,301	818

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APPENDIX III

Pupils and Teachers by Schools

Schools	Pupils			Teachers		
	B	G	T	M	F	T
(I) Government Malay Schools:						
(a) Secondary						
1. Ahmad Tajuddin, K. Belait	219	210	429	22	3	25
2. Jalan Muara, Brunei-Muara	585	313	898	58	10	68
3. Muhammad Alam, Seria	104	117	221	13	1	14
4. Muda Hashim, Tutong	394	331	725	39	6	45
5. S.M.J.A., B. Seri Begawan	974	1,119	2,093	101	18	119
6. Sultan Hassan, Temburong	118	85	203	8	1	9
Total	2,394	2,175	4,569	241	39	280
(b) Primary						
Brunei I						
1. Burong Pingai Ayer	192	203	395	9	5	14
2. Kampong Setia	134	113	247	16	—	16
3. Kampong Sultan Lama	184	213	397	9	11	20
4. Lela Menchanai	515	222	737	22	7	29
5. Pintu Malim	78	60	138	6	2	8
6. Pular Ulak	745	96	841	36	13	49
7. Raja Isteri Fatimah	—	619	619	—	36	36
8. Sungai Kebun	324	686	1,010	25	11	36
Total	2,172	2,212	4,384	123	85	208
Brunei II						
1. Amar Pahlawan	166	136	302	8	10	18
2. Anak2 A.M.D.B.	39	38	77	3	3	6
3. Anggerek Desa	273	230	503	9	12	21
4. Awang Haji Mohd. Yusof	60	60	120	6	1	7
5. Bendahara Sakam, Bunut	166	141	307	7	11	18
6. Bengkurong	30	26	56	3	—	3
7. Dato Maha Wangsa	143	107	250	11	8	19
8. Delima I	97	84	181	5	5	10
9. Gadong	133	119	252	13	3	16
10. Haji Mohd. Salleh	91	106	197	5	6	11
11. Jerudong	48	59	107	5	1	6
12. Kiarong	23	16	39	2	2	4
13. Kiulap	57	50	107	5	4	9
14. Mentiri	14	12	26	2	—	2
15. Mulaut	53	49	102	5	1	6
16. Orang Kaya Besar Imas	56	39	95	6	—	6
17. Orang Kaya Setia Bakti	109	104	213	8	5	13
18. Pantai Jiam	23	17	40	3	—	3
19. Sengkurong	212	188	400	11	10	21
20. Serasa	42	38	80	4	1	5

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21. Sultan Umar Ali Saifuddin (Muara)	111	90	201	7	2	9
22. Tanah Jambu	36	39	75	4	1	5
Total	1,982	1,748	3,730	132	86	218

Brunei III

1. Baru-Baru	25	34	59	3	—	3
2. Batu Marang	74	77	151	5	1	6
3. Berbunut	23	14	37	2	—	2
4. Dato Gandhi	120	112	232	10	1	11
5. Junjongan	36	31	67	3	—	3
6. Kasat	58	30	88	7	—	7
7. Lumapas	115	80	195	8	4	12
8. Masin	27	33	60	3	—	3
9. Menunggol	22	23	45	4	—	4
10. Panchor Murai	49	47	96	5	1	6
11. Pengkalan Batu	28	24	52	5	2	7
12. Penglima Beruddin	65	46	111	6	—	6
13. Puduk	22	11	33	2	—	2
14. Putat	21	24	45	5	—	5
15. Sultan Abd Bobin	34	35	69	6	—	6
Total	719	621	1,340	74	9	83

Tutong I

1. Bakiau	25	26	51	3	2	5
2. Batang Mitus	40	36	76	5	—	5
3. Birau	71	64	135	5	1	6
4. Bukit Panggal	27	26	53	4	1	5
5. Penanjong	78	89	167	4	6	10
6. Sianut	142	87	229	7	6	13
7. Kampong Menengah	33	30	63	3	—	3
8. Keriam	39	46	85	5	2	7
9. Kiudang	112	80	192	7	4	11
10. Lamunin	114	99	213	9	4	13
11. Muda Hashim	108	92	200	6	9	15
12. Orang Kaya Ali Wanika Setia Di-Raja	62	56	118	6	1	7
Total	851	731	1,582	64	36	100

Tutong II

1. Abdul Rashid	61	44	105	3	5	8
2. Belabau	27	9	36	2	—	2
3. Benutan	35	31	66	4	—	4
4. Bukit Udal	49	40	89	4	2	6
5. Danau	39	30	69	5	1	6
6. Dato Pemancha Saging	92	75	167	5	1	6
7. Kampong Bukit	55	32	87	5	—	5
8. Layong	68	52	120	6	2	8

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9. Lubok Pulau	14	16	30	2	2	4
10. Panchong	36	30	66	4	—	4
11. Penapar	43	28	71	3	3	6
12. Pengiran Kesuma Negara	16	17	33	3	—	3
13. Pengiran Muda Mahkota	30	29	59	4	—	4
14. Rambai	55	55	110	6	—	6
15. Sengkarai	98	100	198	4	5	9
16. Sungai Damit, Pematang	27	25	52	2	2	4
17. Supon	36	25	61	4	—	4
18. Tumpuan Telisai	46	56	102	6	1	7
Total	827	694	1,521	72	24	96

Belait

1. Ahmad Tajuddin	467	434	901	20	23	43
2. Bukit Sawat	69	51	120	8	—	8
3. Kuala Balai	8	7	15	2	—	2
4. Labi	48	29	77	6	2	8
5. Lumut	65	49	114	6	1	7
6. Melilas	11	24	35	4	—	4
7. Merangking	33	33	66	3	1	4
8. Md. Alam	700	656	1,356	36	22	58
9. Rampayoh	29	29	58	4	1	5
20. Sukang	34	36	70	5	—	5
11. Sungai Liang	90	85	175	7	1	8
12. Sungai Teraban	43	39	82	4	1	5
Total, Belait	1,597	1,472	3,069	105	52	157

Temburong

1. Amo	24	20	44	3	—	3
2. Belais	22	16	38	3	—	3
3. Belingos	16	12	28	2	—	2
4. Biang Tengah	11	6	17	2	—	2
5. Bokok	51	44	95	7	—	7
6. Kinua	26	28	54	2	—	2
7. Labu Estate	37	23	60	4	1	5
8. Negalang	22	22	44	2	—	2
9. Piasau-Piasau	22	15	37	3	—	3
10. Puni	33	43	76	5	2	7
11. Selangan	39	31	70	3	—	3
12. Semabat	14	11	25	2	—	2
13. Senokoh	21	16	37	3	—	3
14. Sultan Hashim Batu Apoi	48	36	84	4	1	5
15. Sultan Hassan, Bangar	138	96	234	9	3	12
Total, Temburong	524	419	943	54	7	61
Total, Malay Primary	8,672	7,897	16,569	624	299	923
Total, Malay Sec. and Pri.	11,066	10,072	21,138	865	338	1,203

SOCIAL DEVELOPMENT

(II) Government English School

(a) Secondary

1. Anthony Abell College	410	296	706	25	14	39
2. Berakas English School	167	153	320	13*	6†	19
3. Sekolah Tinggi Perempuan Raja Isteri	—	910	910	3	37‡	40
4. Sultan Omar Ali Saifuddin College	1,320	196	1,516	64	7	71
5. Perdana Wazir Eng. School	188	185	373	10	9	19
6. Tutong English School	162	128	290	9	5	14
Total, Govt. Eng. Secondary	2,247	1,868	4,115	124	78	202

(b) Preparatory

1. A.A.C. Preparatory	258	315	573	12	15	27
2. B.P.S. B. Seri Begawan	1,168	1,072	2,240	40	54	94
3. B.P.S. Amar Pahlawan	182	165	347	9	6	15
4. B.P.S. Anggerek Desa	123	135	258	4	5	9
5. B.P.S. Bangar	93	91	184	6	2	8
6. B.P.S. Kilanas	77	99	176	6	3	9
7. B.P.S. Lambak	12	23	35	—	2	2
8. B.P.S. Muara	149	134	283	12	2	14
9. B.P.S. Pengkalan Batu	20	11	31	1	—	1
10. B.P.S. Sengkurong	165	175	340	8	7	15
11. B.P.S. Sungai Hanching	19	16	35	1	—	1
12. P.W.E.S. Kuala Belait	175	216	391	7	11	18
13. T.E.S. Tutong	384	389	773	27	5	32
Total, Govt. Preparatory	2,825	2,841	5,666	133	112	245
Total Government English Secondary & Preparatory	5,072	4,709	9,781	257	190	447

* includes 1 student-teacher

† includes 5 student-teachers

‡ includes 2 student-teachers & 1 V.S.O.

{ on full time T.P.

SOCIAL DEVELOPMENT

(III) Mission English School

(a) Secondary

1. St. Andrew's	228	145	373	13	3	16
2. St. Angela's	—	384	384	3	15	18
3. St. George's	153	134	287	8	7	15
4. St. James's	65	40	105	4	2	6
5. St. John's	103	111	214	8	1	9
6. St. Margaret's	209	166	375	9	8	17
7. St. Michael's	356	7	363	9	11	20
Total, Mission Secondary	1,114	987	2,101	54	47	101

(b) Primary

1. St. Andrew's	369	206	575	6	10	16
2. St. Angela's	—	490	490	—	12	12
3. St. George's	287	224	511	1	14	15
4. St. James's	152	92	244	—	8	8
5. St. John's	277	206	483	—	17	17
6. St. Margaret's	277	182	459	1	12	13
7. St. Michael's	459	—	459	1	12	13
Total Mission Primary	1,821	1,400	3,221	9	85	94
Total Mission Secondary & Primary	2,935	2,387	5,322	63	132	195

(c) Kindergarten

1. St. Andrew's	39	30	69	—	4	4
2. St. Angela's	—	40	40	—	2	2
3. St. George's	47	50	97	1	1	2
4. St. James's	25	11	36	—	2	2
5. St. John's	40	30	70	—	2	2
6. St. Margaret's	25	18	43	—	2	2
7. St. Michael's	33	—	33	1	1	2
Total, Mission Kindergarten	209	179	388	2	14	16
Total, Mission Secondary, Primary & Kindergarten	3,144	2,566	6,710	65	146	211

SOCIAL DEVELOPMENT

(IV) Chinese Schools

(a) Secondary

1. Chung Ching, Seria	188	89	277	12	4	16
2. Chung Hwa, B. Seri Begawan	98	95	193	15	5	20
3. Chung Hwa, Kuala Belait	68	39	107	8	2	10
Total, Chinese Secondary	354	223	577	35	11	46

(b) Primary

1. Chung Ching, Seria	735	590	1,325	15	32	47
2. Chung Hwa, B. Seri Begawan	842	695	1,537	8	36	44
3. Chung Hwa, Kuala Belait	393	345	738	4	12	16
4. Chung Hwa, Kiudang	20	11	31	2	—	2
5. Chung Hwa, Labi	67	46	113	3	3	6
6. Chung Hwa, Tutong	71	49	120	3	2	5
7. Chung Lian, Sungai Liang	76	59	135	2	5*	7
8. Pai Yuek, Bangar	25	22	47	1	2	3
Total, Chinese Primary	2,229	1,817	4,046	38	92	130
Total, Chinese Sec. & Pri.	2,583	2,040	4,623	73	103	176

(c) Kindergarten

1. Chung Ching, Seria	138	119	257	—	5	5
2. Chung Hwa, B. Seri Begawan	144	126	270	—	7	7
3. Chung Hwa, Kuala Belait	86	83	169	—	4	4
4. Chung Hwa, Labi	9	9	15	†	†	†
5. Chung Hwa, Tutong	23	19	42	—	1	1
6. Chung Lian, Sungai Liang	15	15	30	—	3	3
Total, Chinese Kindergarten	415	368	783	—	20	20
Total, Chinese Secondary, Primary & Kindergarten	2,998	2,408	5,406	73	123	196

(V) Other Schools

(a) Primary

Panaga (B.S.P. Co. Ltd.)	100	90	190	1	13	14
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(b) Kindergarten

Panaga (B.S.P. Co. Ltd)	14	16	30	—	2	2
Total, Other Pri. & Kind.	114	106	220	1	15	16

* three of whom are also teaching in the Kindergarten Section of the same school.

† has been included under Primary Section.

SOCIAL DEVELOPMENT

(IV) Vocational School

(B.S.P. Co. Ltd.)

B.S.P. Artisan Training School	115	—	115	10	—	10
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(VII) Govt. Technical Schools

1. Building Trade School, B.S.B.	49	—	49	†11	—	†11
2. Eng'ring Trade School, K.B.	62	—	62	*8	—	*8
Total, Govt. Tech. Schools	111	—	111	19	—	19

(VIII) Govt. Teachers'

Training College

1. Group A (G.C.E. students)	124	103	227			
2. Group B (L.C.E. students)	62	39	101	11	6	17
Total Brunei Teachers' College	186	142	328	11	6	17

Summary

(i) Govt. Malay Schools	11,066	10,072	21,138	865	388	1,203
(ii) Govt. English Schools	5,072	4,709	9,781	257	190	447
(iii) Mission English Schools	3,144	2,566	5,710	65	146	211
(iv) Chinese Schools	2,998	2,408	5,406	73	123	196
(v) Other Schools	114	106	220	1	15	16
(vi) Voc. School (Non-Govt.)	115	—	115	10	—	10
(vii) Tech. Schools (Govt.)	111	—	111	19	—	19
(viii) Govt. Teachers' Training						
College	196	153	349	11	6	17
Grand Total, 1971	22,806	20,003	42,809	1,301	818	2,119
Grand Total, 1970	21,317	18,812	40,129	1,131	655	1,786
Increase in 1971	1,489	1,191	2,680	170	163	333

* Trained Technical instructors.

† 10 of them are trained Technical instructors and 1 a pass graduate trained teacher.

SOCIAL DEVELOPMENT

APPENDIX IV

Enrolment by Classes, April, 1971

1. Government Malay Schools

School Level	Non-Repeaters				Repeaters				Total			
	C	B	G	T	B	G	T	C	B	G	T	
Primary Level	Standard I	194	2,211	1,991	4,202	—	—	—	194	2,211	1,991	4,202
	Standard II	148	1,510	1,357	2,867	—	—	—	148	1,510	1,357	2,867
	Standard III	162	1,676	1,674	3,350	—	—	—	162	1,676	1,674	3,350
	Standard IV	156	1,632	1,441	3,073	32	19	51	156	1,664	1,460	3,124
	Standard V	108	876	714	1,590	—	—	—	108	876	714	1,590
	Standard VI	86	548	561	1,109	187	140	327	86	735	701	1,436
	Total Primary	854	8,453	7,738	16,191	219	159	378	854	8,672	7,897	16,569
Sec. Level	Form I	38	552	481	1,033	—	—	—	38	552	481	1,033
	Form II	31	442	476	918	—	—	—	31	442	476	918
	Form III	58	542	600	1,142	273	305	578	58	815	905	1,720
	Form IV	14	245	147	392	—	—	—	14	245	147	392
	Form V	13	142	67	209	89	53	142	13	231	120	351
	Form Lower VI	4	83	35	118	—	—	—	4	83	35	118
	Form Upper VI	2	26	11	37	—	—	—	2	26	11	37
Grand Total	Total Secondary	160	2,032	1,817	3,849	362	358	720	160	2,394	2,175	4,569
		1,014	10,451	9,537	19,988	581	517	1,098	1,014	11,066	10,072	21,138

SOCIAL DEVELOPMENT

2. Government English Schools

School Level	Non-Repeaters						Repeaters						Total		
	C	B	G	T	B	G	T	C	B	G	T	C	B	G	T
Prep. Level															
Preparatory I	61	993	1,004	1,997	—	—	—	—	—	—	—	61	993	1,004	1,997
Preparatory II	50	827	813	1,640	—	—	—	—	—	—	—	50	827	813	1,640
Preparatory III	60	743	808	1,551	262	216	478	60	1,005	1,024	2,029	60	1,005	1,024	2,029
Total Preparatory	171	2,563	2,625	5,188	262	216	478	171	2,825	2,841	5,666	171	2,825	2,841	5,666
Sec. Level															
Form I	40	673	591	1,264	—	—	—	40	673	591	1,264	40	673	591	1,264
Form II	29	482	438	920	—	—	—	29	482	438	920	29	482	438	920
Form III	35	398	391	789	153	172	325	35	551	563	1,114	35	551	563	1,114
Form IV	12	202	160	362	—	—	—	12	202	160	362	12	202	160	362
Form V	10	181	79	260	15	4	19	10	196	83	279	10	196	83	279
Form Lower VI	4	74	29	103	—	—	—	4	74	29	103	4	74	29	103
Form Upper VI	3	51	4	55	18	—	18	3	69	4	73	3	69	4	73
Total Secondary	133	2,061	1,692	3,753	186	176	362	133	2,247	1,868	4,115	133	2,247	1,868	4,115
Grand Total	304	4,624	4,317	8,941	448	392	840	304	5,072	4,709	9,781	304	5,072	4,709	9,781

SOCIAL DEVELOPMENT

3. Mission English School

School Level	Non-Repeaters			Repeaters			Total					
	C	B	G	T	B	G	T	C	B	G	T	
Pre-Pri. Level	9	187	160	347	22	19	41	9	209	179	388	
Primary Level	Kindergarten											
	Standard I	13	261	195	456	26	11	37	13	287	206	493
	Standard II	13	259	205	464	32	4	36	13	291	209	500
	Standard III	13	258	202	460	54	13	67	13	312	215	527
	Standard IV	12	231	182	413	37	18	55	12	268	200	468
	Standard V	13	229	215	444	53	19	72	13	282	234	516
	Standard VI	16	263	251	514	40	15	55	16	303	266	569
	Prep.-Form*	4	49	58	107	29	12	41	4	78	70	148
Total Primary	84	1,550	1,308	2,858	271	92	263	84	1,821	1,400	3,221	
Sec. Level	Form I	15	258	268	526	21	17	38	15	279	285	564
	Form II	13	248	208	456	12	8	20	13	260	216	476
	Form III	13	235	191	426	15	20	35	13	250	211	461
	Form IV	10	169	167	336	4	2	6	10	173	169	342
	Form V	8	120	99	219	—	—	—	8	120	99	219
	Form Lower VI	1	17	2	19	—	—	—	1	17	2	19
	Form Upper VI	1	15	5	20	—	—	—	1	15	5	20
	Total Secondary	61	1,062	940	2,002	52	47	99	61	1,114	987	2,101
Grand Total	145	2,821	2,408	5,229	323	158	481	154	3,144	2,566	5,710	

* Sometimes known as transition class.

SOCIAL DEVELOPMENT

4. Chinese Schools

School Level	Non-Repeaters			Repeaters			Total				
	C	B	G	T	B	G	T	C	B	G	T
Pre-Pri. Level Kindergarten	20	347	313	660	68	55	123	20	415	368	783
Primary Level Standard I	23	400	299	699	90	47	137	23	490	346	836
Standard II	21	328	321	649	114	57	171	21	442	378	820
Standard III	22	326	279	605	112	72	184	22	438	351	789
Standard IV	19	281	269	550	56	38	94	19	337	307	644
Standard V	17	246	206	452	42	31	73	17	288	237	525
Standard VI	14	219	181	400	15	17	32	14	234	198	432
Total Primary	116	1,800	1,555	3,355	429	262	691	116	2,229	1,817	4,046
Sec. Level Junior Middle I	5	115	79	194	14	10	24	5	129	89	218
Junior Middle II	4	68	41	109	6	3	9	4	74	44	118
Junior Middle III	3	50	44	94	2	3	5	3	52	47	99
Senior Middle I	2	29	13	42	4	1	5	2	33	14	47
Senior Middle II	2	29	16	45	—	1	1	2	29	17	46
Senior Middle III	2	37	12	49	—	—	—	2	37	12	49
Total Secondary	18	328	205	533	26	18	44	18	354	223	577
Grand Total	154	2,475	2,073	4,548	523	335	858	154	2,998	2,408	5,406

SOCIAL DEVELOPMENT

5. Other School

School Level	Non-Repeaters				Repeaters				Total		
	C	B	G	T	B	G	T	C	B	G	T
Pre-Pri. Level	1	14	16	30	—	—	—	1	14	16	30
Kindergarten	2	17	12	29	—	—	—	2	17	12	29
Transition Class	2	13	18	31	—	—	—	2	13	18	31
Standard I	2	20	13	33	1	—	1	2	21	13	34
Standard II	2	19	13	32	—	—	—	2	19	13	32
Standard III	2	7	12	19	—	—	—	2	7	12	19
Standard IV	2	12	12	24	—	—	—	2	12	12	24
Standard V	2	11	10	21	—	—	—	2	11	10	21
Standard VI	14	99	90	189	1	—	1	14	100	90	190
Total Primary	15	113	106	219	1	—	1	15	114	106	220
Grand Total											

APPENDIX V
Pupils And Teachers Per Class, April, 1971

Type of School/College	Total No. of Pupils	Total No. of Classes	Total No. of Teachers	Average No. of Pupils per Class	Average No. of Teachers per Class
PRIMARY/PREPARATORY					
Government Malay	16,569	854	923	19	1
Government English	5,666	171	245	33	1.4
Mission	3,221	84	94	38	1
Chinese	4,046	116	130	35	1
Other	190	14	14	13	1
SECONDARY					
Govt. Malay Form I—U. VI	4,569	160	280	29	1.7
Govt. English Form I—U. VI	4,115	133	202	31	1.5
Mission Form I—U. VI	2,101	61	101	35	1.6
Chinese J.M. I—S.M. III	577	18	46	32	2.5

SOCIAL DEVELOPMENT

APPENDIX VI

Analysis of Pupils by Race

Type of School/College	Total												
	Malay*		Chinese		Indian		Other Races		B		G		T
	B	G	B	G	B	G	B	G	B	G	B	G	
GOVERNMENT:-													
Malay	10,852	9,908	190	147	8	6	16	11	11,066	10,072	21,138		
English	4,583	4,124	459	557	22	16	8	12	5,072	4,709	9,781		
Technical	103	—	4	—	—	—	4	—	111	—	111		
Teacher Training	163	94	23	48	—	—	—	—	186	142	328		
NON-GOVERNMENT													
Mission	872	532	1,859	1,621	138	127	275	286	3,144	2,566	5,710		
Chinese	132	117	2,862	2,286	1	1	3	4	2,998	2,408	5,406		
Other	2	—	—	—	3	3	109	103	114	106	220		
Vocational	29	—	83	—	2	—	1	—	115	—	115		
Total	16,736	14,775	5,480	4,659	174	153	416	416	22,806	20,003	42,809		

* including the Indigenous Groups.

APPENDIX VII
Analysis Of Pupils By Age, April 1971
1. Government Malay Primary

Age	Std. I		Std. II		Std. III		Std. IV		Std. V		Std. VI		Total Primary		Total						
	Non-Repeater		Non-Repeater		N.-Rpts		Repeater		Non-Repeater		Repeater		N.-Rpts								
	M	F	M	F	M	F	M	F	M	F	M	F	M	F							
Under 5	16	1	—	—	—	—	—	—	—	—	—	—	—	16	1	—	—	17			
5	797	722	2	1	—	—	—	—	—	—	—	—	—	799	723	—	—	1522			
6	1092	851	343	236	7	8	—	—	—	—	—	—	—	1442	1095	—	—	2537			
7	225	303	628	603	235	225	4	4	—	—	—	—	—	1092	1135	—	—	2227			
8	40	77	358	350	694	671	171	233	—	3	5	8	—	—	1268	1339	—	3	2610		
9	26	20	128	110	480	506	554	527	4	5	66	79	4	1	—	1258	1243	4	5	2510	
10	11	9	30	31	174	172	509	383	7	5	182	179	15	27	7	2	921	801	14	7	1743
11	2	6	16	17	58	62	230	179	7	2	213	183	72	86	18	11	591	533	25	13	1162
12	1	2	4	7	20	23	92	75	6	4	197	157	124	126	28	17	438	390	34	21	883
13	1	—	1	1	5	6	46	26	3	—	120	63	141	159	43	41	314	255	46	41	656
14	—	—	—	1	3	1	14	10	1	—	61	27	120	80	50	30	198	119	51	30	398
15	—	—	—	—	—	—	9	3	2	—	23	16	46	63	25	25	78	82	27	23	210
16	—	—	—	—	—	—	2	—	1	—	6	1	20	12	14	8	28	13	15	8	64
17	—	—	—	—	—	—	1	1	1	—	3	1	4	6	2	6	8	8	3	6	25
18	—	—	—	—	—	—	—	—	—	—	1	1	—	1	2	1	1	—	—	2	4
19	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	2211	1991	1510	1357	1676	1674	1632	1441	32	19	876	714	548	561	187	140	8453	7798	219	159	16569

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

2. Government Malay Secondary

Age	Form I				Form II				Form III				Form IV				Form V				Form L. VI				Form U. VI				Total Secondary				Total		
	Non-Repeater				Repeater				Non-Repeater				Repeater				Non-Repeater				Repeater				N-Rpts				Repeaters						
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T						
9																																			
10	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
11	11	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	
12	34	44	6	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92	
13	116	104	21	23	7	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	
14	148	138	74	94	27	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	504	
15	134	107	115	140	66	88	2	8	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	667	
16	81	51	116	108	152	150	48	39	12	5	8	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	772	
17	20	17	70	67	150	183	60	66	49	22	9	4	2	1	5	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	729	
18	5	7	33	22	98	112	87	88	73	42	48	17	13	8	9	4	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	672	
19	2	—	5	12	33	30	47	65	63	39	37	24	19	17	23	11	7	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	438	
20	—	—	2	1	6	10	22	23	28	16	29	14	30	14	24	6	6	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	235	
21	—	—	—	—	1	3	2	6	12	10	13	7	4	18	10	14	7	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	
22	—	—	—	—	—	—	1	1	1	4	8	3	1	4	3	5	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 24	552	481	442	476	542	600	273	305	245	147	142	67	89	53	83	35	26	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4569

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

3. Government English Preparatory

Age	Prep. I		Prep. II		Prep. III		Non-Repeaters		Repeaters		Total Preparatory		Total T
	Non-Repeaters M	Non-Repeaters F	Non-Repeaters M	Non-Repeaters F	Non-Repeaters M	Non-Repeaters F	Non-Repeaters M	Non-Repeaters F	Repeaters M	Repeaters F	Non-Repeaters M	Non-Repeaters F	
7 years	—	1	—	1	—	—	—	—	—	—	—	2	2
8	10	5	—	—	—	—	—	—	—	—	—	5	15
9	187	144	4	6	—	—	—	—	—	—	—	150	341
10	342	339	76	113	2	4	—	—	—	—	—	456	876
11	352	399	271	241	90	126	—	1	—	1	713	766	1480
12	97	101	331	307	264	283	27	18	692	691	27	18	1428
13	5	15	137	122	263	273	45	45	405	410	45	45	905
14	—	—	8	23	115	107	144	100	123	130	144	100	497
15	—	—	—	—	9	15	41	45	9	15	41	45	110
16	—	—	—	—	—	—	5	7	—	—	5	7	12
17	—	—	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	993	1004	827	813	743	808	262	216	2863	2625	262	216	5666

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

4. Government English Secondary

Age	Form I				Form II				Form III				Form IV				Form V				Form L. VI				Form U. VI				N.-Rpts				Total Secondary				Total T
	Non-Repeaters				Repeaters				Non-Repeaters				Repeaters				Non-Repeaters				Repeaters				N.-Rpts				Repeaters								
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F							
9																																					
10																																					
11	5	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6				
12	75	59	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	77				
13	135	148	25	31	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	161				
14	194	171	101	94	19	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	316				
15	179	149	152	112	71	67	1	2	5	6	1	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	408				
16	75	56	108	133	138	114	12	19	30	24	13	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	364				
17	10	8	69	48	96	132	28	61	58	82	32	16	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	273				
18	—	—	20	11	61	55	55	50	67	39	50	22	3	1	14	6	7	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	219				
19	—	—	4	5	9	8	37	30	24	20	45	15	7	3	34	12	4	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	120				
20	—	—	—	—	—	1	13	9	14	8	23	6	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85				
21	—	—	—	—	—	2	—	5	1	1	—	15	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35				
22	—	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11				
23	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5				
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Over 24	673	591	482	438	398	391	153	172	202	180	181	79	15	4	74	29	51	4	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2081			
																																	1692				
																																	186				
																																	178				
																																	4115				

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

5. Mission, Kindergarten; Primary Std. I—V

Age	Kindergarten						Std. I						Std. II						Std. III						Std. IV						Std. V						
	N.-Rep.			Repeaters			N.-Rep.			Repeaters			N.-Rep.			Repeaters			N.-Rep.			Repeaters			N.-Rep.			Repeaters			N.-Rep.			Repeaters			
	M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		
Under 5	59	51	11	14	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	75	80	8	4	46	38	5	—	1	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6	37	26	3	1	81	97	6	7	38	31	—	—	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
7	15	3	—	—	87	46	6	2	69	65	5	2	28	28	3	2	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
8	—	—	—	—	30	2	4	2	64	78	7	1	51	66	5	1	13	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9	—	—	—	—	8	5	4	—	47	18	6	—	72	48	15	2	51	43	6	3	16	25	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	—	—	—	—	3	1	1	—	23	7	5	—	46	35	11	2	47	47	6	4	34	41	4	—	—	—	—	—	—	—	—	—	—	—	—	—	
11	—	—	—	—	—	—	—	—	10	—	6	1	24	16	5	4	43	31	9	5	47	58	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
12	—	—	—	—	1	—	—	—	4	1	2	—	20	3	5	2	32	21	5	—	40	36	14	—	—	—	—	—	—	—	—	—	—	—	—	—	
13	—	—	—	—	—	—	—	—	2	—	1	—	14	1	6	—	27	12	6	4	38	19	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
14	—	—	—	—	—	—	—	—	1	—	—	—	3	1	4	—	9	3	2	—	23	21	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	1	3	—	21	6	3	—	—	—	—	—	—	—	—	—	—	—	—	—	
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Over 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	187	160	22	19	261	195	26	11	259	205	32	4	258	202	54	13	231	182	37	18	229	215	53	—	—	—	—	—	—	—	—	—	—	—	—	19	

SOCIAL DEVELOPMENT

Analysis of Pupils By Age, April 1971 Mission, Primary Std. VI & Transition Class; Secondary Form III

Age	Std. VI				Transition Class				Total Primary				Form I				Form II				Form III				
	N.-Rep.		Repeaters		N.-Rep.		Repeaters		N.-Rep.		Repeaters		N.-Rep.		Repeaters		N.-Rep.		Repeaters		N.-Rep.		Repeaters		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Under 5	—	—	—	—	—	—	—	—	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5	—	—	—	—	—	—	—	—	47	43	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
6	—	—	—	—	—	—	—	—	121	132	6	7	—	—	—	—	—	—	—	—	—	—	—	—	
7	—	—	—	—	—	—	—	—	183	145	14	6	—	—	—	—	—	—	—	—	—	—	—	—	
8	—	1	—	—	—	—	—	—	158	172	18	6	—	—	—	—	—	—	—	—	—	—	—	—	
9	3	6	—	—	—	—	—	—	197	145	37	5	—	—	—	—	—	—	—	—	—	—	—	—	
10	14	32	2	3	2	5	1	—	169	168	30	12	—	—	—	—	—	—	—	—	—	—	—	—	
11	36	45	1	—	3	5	2	2	163	156	28	15	4	14	—	—	2	—	—	—	—	—	—	—	
12	56	48	11	3	10	17	4	3	163	127	41	12	22	43	—	2	9	4	—	—	1	1	—	—	
13	57	36	8	5	9	16	—	—	147	84	31	12	42	51	6	—	21	27	1	—	9	19	—	—	
14	46	43	13	2	11	7	2	—	93	75	28	7	49	60	3	11	40	37	3	—	28	21	2	1	
15	28	29	4	1	6	4	2	1	61	40	12	2	59	42	5	3	50	35	1	4	40	37	—	2	
16	15	9	1	1	3	3	7	3	26	14	11	5	47	38	4	1	42	47	3	1	47	29	3	5	
17	8	1	—	—	—	5	—	6	1	16	2	7	1	22	18	—	—	51	38	1	—	50	32	5	4
18	—	—	—	—	—	1	5	2	1	5	2	1	10	2	—	—	33	11	1	11	38	33	5	3	
19	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—	2	7	2	2	14	14	—	4	
20	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	5	—	1	
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971 Mission, Secondary Form IV — Form Lower VI

Age	Form IV			Form V			Form Lower VI			Form Upper VI			Total			T	
	N.-Rep. M	N.-Rep. F	Repeaters M F	N.-Rep. M	N.-Rep. F	Repeaters M F	N.-Rep. M	N.-Rep. F	Repeaters M F	N.-Rep. M	N.-Rep. F	Repeaters M F	N.-Rep. M	N.-Rep. F	Repeaters M F		
Under 5																	
5																	
6																	
7																	
8																	
9																	
10																	
11	—	—	—	—	—	—	—	—	—	—	—	—	4	16	—	20	
12	—	—	—	—	—	—	—	—	—	—	—	—	32	48	—	82	
13	—	1	—	—	—	—	—	—	—	—	—	—	72	98	7	177	
14	7	10	—	—	—	—	—	—	—	—	—	—	125	128	8	273	
15	14	28	—	4	12	—	—	—	—	—	—	—	167	154	6	336	
16	27	26	1	—	14	20	—	5	—	—	1	—	182	161	11	361	
17	31	33	—	24	17	—	7	—	—	2	1	—	187	139	6	336	
18	40	46	—	1	24	16	—	5	—	3	1	—	153	109	6	273	
19	36	18	—	1	29	18	—	—	1	4	2	—	88	60	5	160	
20	8	4	2	—	10	12	—	—	1	4	—	—	29	22	2	54	
21	6	1	—	—	13	4	—	—	1	—	—	—	21	5	—	26	
22	—	—	1	—	—	—	—	—	—	1	—	—	1	—	1	2	
23	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Over 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	169	167	4	2	120	99	—	17	2	—	15	5	—	1082	940	52	2101

Analysis Of Pupils By Age, April 1971

6. Chinese Schools

Age	Kindergarten						Std. I			Std. II			Std. III			Std. IV			Std. V		
	N.-Rep.	Rep.	N.-Rep.	Rep.	N.-Rep.	Rep.	N.-Rep.	Rep.	N.-Rep.	N.-Rep.	Rep.	N.-Rep.	N.-Rep.	Rep.	N.-Rep.	N.-Rep.	Rep.	N.-Rep.	N.-Rep.	Rep.	N.-Rep.
	M	F	M	F	M	F	M	F	M	M	F	M	M	F	M	M	F	M	M	F	M
Under 5	76	72	3	3			1														
5	165	145	18	13	27	20	1		1												
6	91	73	26	25	135	115	6	9	22	22											
7	21	18	13	7	149	108	37	18	90	105	15	10									
8	3	5	2	2	58	39	32	13	109	98	28	18									
9					15	13	8	6	70	58	36	18	69	98	6	3					
10					10	3	6	1	19	29	21	10	63	56	40	22	76	93	20	18	
11		1			4	1			15	7	7		57	23	17	16	74	54	10	9	68
12					1				1	6	1		23	9	14	2	43	29	8	5	58
13					1				2				8	2	6	1	22	13	5	3	44
14										1							8	7	5		23
15													1				3	3			15
16																					7
17																					1
18																					3
20																					
21																					
22																					
23																					
24																					
Over 24																					
Total	347	313	68	55	400	299	90	47	328	321	114	57	326	279	112	72	281	269	56	36	248
																					42
																					31

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971 Chinese Schools

Age	Std. VI		Total Primary				J.M. I				J.M. II				J.M. III				Total Junior Middle			
	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters	N-Rep.	Repeaters		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Under 5																						
5	—	—	27	21	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6	—	—	157	137	6	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7	—	—	246	223	52	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8	—	—	240	238	66	34	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9	1	—	236	217	81	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10	4	6	204	222	88	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
11	42	42	258	201	43	37	3	2	—	2	2	—	—	—	—	—	5	4	—	—		
12	58	80	184	165	43	17	16	15	2	1	13	10	—	—	—	—	29	25	2	1		
13	59	29	2	9	136	74	24	17	39	19	4	3	11	12	2	—	52	35	6	3		
14	28	12	5	6	59	34	16	11	27	20	6	2	10	6	3	2	8	11	1	1		
15	17	12	4	1	36	22	5	3	19	17	1	2	13	8	1	1	20	14	—	2		
16	9	—	1	—	16	1	4	1	11	5	1	2	9	2	—	—	8	10	1	—		
17	1	—	—	—	—	—	—	—	1	—	—	—	6	1	—	—	8	5	—	—		
18	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	4	—	—	—		
19	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	—		
20																						
21																						
22																						
23																						
24																						
Over 24	119	181	15	17	1800	1555	429	282	115	79	14	10	68	41	6	3	50	44	2	3	233	164
Total	119	181	15	17	1800	1555	429	282	115	79	14	10	68	41	6	3	50	44	2	3	233	164
																					22	16

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

Chinese Schools

Age	S.M. I			S.M. II			S.M. III			Total S.M. I—III			Total Secondary S.M. I—III			Total T					
	N-Rep. M	Rep. F	Rep. M	N-Rep. M	Rep. F	Rep. M	N-Rep. M	Rep. F	Rep. M	Non-Rep. M	Rep. F	Rep. M	Non-Rep. M	Rep. F	Rep. M						
Under 5																					
5																					
6																					
7																					
8																					
9																					
10																					
11	—	—	—	—	—	—	—	—	—	—	—	—	5	4	—	9					
12	—	—	—	—	—	—	—	—	—	—	—	—	29	25	2	57					
13	—	—	—	—	—	—	—	—	—	—	—	—	52	35	6	96					
14	1	1	—	—	—	—	—	—	—	1	1	—	46	38	10	99					
15	4	3	1	—	—	—	—	—	—	4	3	1	56	42	3	107					
16	10	2	1	—	5	6	—	—	—	16	8	1	44	25	3	74					
17	8	4	2	—	13	4	—	9	5	3	4	30	13	5	4	73					
18	5	3	—	—	6	5	—	1	14	3	3	25	11	3	4	49					
19	1	—	—	—	2	1	—	—	11	3	2	1	16	4	2	23					
20	—	—	—	—	2	—	—	—	—	3	—	—	3	—	—	3					
21	—	—	—	—	1	—	—	—	—	2	1	—	2	1	—	3					
22																					
23																					
24																					
Over 24																					
Total	29	13	4	1	29	16	—	1	37	12	8	8	95	41	12	10	328	205	34	26	583

SOCIAL DEVELOPMENT

Analysis Of Pupils By Age, April 1971

7. Other School, Kindergarten and Primary Std. I — VI

Age	Kindergarten		Entrance		Std. I		Std. II		Std. II R		Std. III		Std. IV		Std. V		Std. VI		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 5	14	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	16
5	—	—	12	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	9
6	—	—	5	3	11	17	—	—	—	—	—	—	—	—	—	—	—	—	16	20
7	—	—	—	—	2	1	12	5	—	—	—	—	—	—	—	—	—	—	14	6
8	—	—	—	—	—	—	6	6	—	—	14	11	—	1	—	—	—	—	20	18
9	—	—	—	—	—	—	2	2	1	—	5	2	5	8	—	—	—	—	13	12
10	—	—	—	—	—	—	—	—	—	—	—	—	2	3	6	8	—	1	8	12
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	4	6	10	10	10
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	1	7	1
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14	16	17	12	13	18	20	13	1	—	19	13	7	12	12	12	11	10	114†	108

† includes 1 male repeater

* all are non-repeaters

SOCIAL DEVELOPMENT

Analyses Of Pupils By Age, April 1971 8. Brunei Teachers Training College

Age	1st Year		3rd Year		1st Year		2nd Year		3rd Year		Total	T
	M	F	M	F	M	F	M	F	M	F		
15 years	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	3	—	1	—	—	—	4	9
17	—	—	—	—	7	3	1	1	—	2	9	18
18	—	—	—	—	9	18	14	4	1	3	38	67
19	—	—	—	—	18	18	19	10	4	8	63	107
20	—	—	—	—	7	5	7	16	9	6	38	78
21	—	—	—	—	5	3	6	3	3	3	20	33
22	—	—	—	—	—	2	4	—	4	—	10	15
23	—	—	—	—	—	—	—	—	—	—	—	2
24	—	—	—	—	—	—	—	—	—	—	—	4
Over 24	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	49	47	53	34	22	22	186	328

SOCIAL DEVELOPMENT

Analysis Of Students By Age, April, 1971

9. Technical and Volcational Schools

Age	Govt. Trade Schools*				Non-Govt. B.P.S.C.†		M	Total F	T
	Building	F	Engineering	F	Vocational	F			
16	1	—	—	—	—	—	1	—	1
17	1	—	—	—	1	—	2	—	2
18	14	—	6	—	14	—	34	—	34
19	19	—	15	—	12	—	46	—	46
20	9	—	18	—	23	—	50	—	50
21	3	—	6	—	26	—	35	—	35
22	2	—	9	—	20	—	31	—	31
23	—	—	5	—	14	—	19	—	19
24	—	—	2	—	4	—	6	—	6
25	—	—	1	—	1	—	2	—	2
Over 25									
Total	49	—	62	—	115	—	226	—	226

* All are first years students.

† Stages are not known.

APPENDIX VIII

Hostel Boarders & Pupils Receiving Subsistence Allowance or Free Daily Transport.

April, 1971 (Government Schools only)

School/College	Hostel Boarders		Pupils Receiving Subsistence Allowance			Pupils Receiving Free Daily Transport			Boats			
	M	F	T	M	F	T	M	F	T	M	F	T
Malay Primary	1	1	2	50	44	94	3	7	10	102	261	363
Malay Secondary	127	41	168	406	294	700	1005	892	1897	—	—	—
English Preparatory	62	37	99	160	178	338	581	605	1186	350	158	508
English Secondary	323	95	418	86	78	164	529	530	1059	1	2	3
Building Trade School	—	—	—	44	—	44	34	—	34	—	—	—
Engineering Trade Schools	13	—	13	74	—	74	63	—	63	—	—	—
Teachers Training College	196	153	349	—	—	—	64	53	117	—	—	—
Total	722	327	1049	820	594	1414	2279	2087	4366	453	421	874

SOCIAL DEVELOPMENT

Appendix IX

Teachers By Qualification, 1971

Type of School/College	Honours Graduate				Pass Graduate				Non-Graduate A Level				Non-Grad. O Level or			
	Trained		Untrained		Trained		Untrained		Trained		Untrained		Trained		Untrained	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
KINDERGARTEN																
Mission	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Chinese	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—
Other	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	2
Total Kindergarten	—	1	—	—	—	—	—	—	—	2	1	—	—	7	—	11
PRIMARY/PREPARATORY																
Government Malay	—	—	—	—	1	9	—	—	—	—	—	—	21	4	—	1
Government English	—	—	—	—	—	—	1	1	—	—	—	—	39	45	16	8
Mission	—	—	—	—	1	1	—	—	—	—	1	5	—	3	2	39
Chinese	1	—	—	—	—	—	—	—	—	—	1	1	5	2	23	57
Other	1	1	—	—	2	10	2	1	—	10	—	—	—	3	—	—
Total Primary/Preparatory	3	—	—	—	—	—	1	—	10	10	2	6	65	57	41	105
SECONDARY																
Government Malay	17	4	7	2	35	17	7	8	10	2	—	—	121	19	—	—
Government English	3	3	2	2	7	6	25	9	3	6	1	—	49	35	—	—
Mission	—	—	—	—	14	5	16	5	1	2	6	7	2	2	6	13
Chinese	—	—	—	—	—	—	—	—	—	—	3	1	1	—	1	—
Other	23	7	9	4	56	28	49	22	—	—	—	—	—	—	—	—
Total Secondary	—	—	—	—	—	—	—	—	14	10	10	8	173	56	7	13
TECHNICAL/VOCATIONAL																
Government Technical	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Technical/Vocational	2	1	—	—	4	—	—	—	—	—	—	—	—	—	—	—
Government Teacher Training	26	9	9	4	62	38	52	23	24	22	13	14	243	125	48	129
Total All Schools & Colleges																

SOCIAL DEVELOPMENT

Teachers By Qualification, April, 1971

Type of School/College	Non-Grad. Below 'O' Level or Chinese Senior Middle				Technical Instructors				Trained				Total Untrained				Total F	M	T
	Trained		Untrained		Trained		Untrained		M		F		M		F				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F					
KINDERGARTEN																			
Mission	—	—	—	7	—	—	—	—	—	—	3	2	11	2	14	16			
Chinese	—	—	—	9	—	—	—	—	—	—	6	—	14	—	20	20			
Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2			
Total Kindergarten	—	—	—	16	—	—	—	—	—	—	9	2	27	2	36	38			
PRIMARY/PREPARATORY																			
Government Malay	584	266	19	27	—	—	—	—	605	271	271	19	28	624	299	923			
Government English	64	38	6	12	—	—	—	—	111	92	92	22	20	133	112	245			
Mission	—	2	2	35	—	—	—	—	3	5	5	6	80	9	85	94			
Chinese	1	1	6	30	—	—	—	—	7	4	4	31	88	38	92	130			
Other	—	—	—	—	—	—	—	—	1	13	13	—	—	1	13	14			
Total Primary	649	307	33	104	—	—	—	—	727	385	385	78	216	805	601	1406			
SECONDARY																			
Government Malay	106	18	—	—	—	—	—	—	240	39	39	1	—	241	39	280			
Government English	5	6	—	—	—	—	—	—	109	68	68	15	10	124	78	202*			
Mission	1	—	1	3	—	—	—	—	14	13	13	40	34	54	47	101			
Chinese	—	—	—	—	—	—	—	—	15	5	5	20	6	35	11	46			
Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Total Secondary	112	24	1	3	—	—	—	—	378	125	125	76	50	454	175	629			
TECHNICAL VOCATIONAL																			
Government Technical	—	—	—	—	19	—	—	—	19	—	—	—	—	19	—	19			
Other	—	—	—	—	10	—	—	—	10	—	—	—	—	10	—	10			
Total Technical/Vocational	—	—	—	—	29	—	—	—	29	—	—	—	—	29	—	29			
Government Teacher Training	—	—	—	—	11	—	—	—	11	6	6	—	—	11	—	17			
Total, All Schools & Colleges	761	331	34	123	29	—	—	—	1145	525	525	156	283	1301	818	2119			
Includes 8 student teachers on full-time Teaching Practice and 1 V.S.O																			

* Includes 8 student teachers on full-time Teaching Practice and 1 V.S.O.

APPENDIX X
Overseas Students, Month Ending June, 1971
Government Scholarships

Course	Malaysia		S'pore		Philippines		U.K.		Canada		Australia		U.S.A.		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. POST GRADUATE																
Engineering	—	—	—	—	—	—	3	—	—	—	—	—	—	—	3	—
Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medicine	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Total Post Graduate	—	—	—	—	—	—	4	—	—	—	—	—	—	—	4	—
2. GRADUATE																
Agriculture	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Antropology	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Architecture	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Biochemistry	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Chemical Engineering	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Civil Engineering	—	—	—	—	—	—	3	—	—	—	1	—	—	—	4	—
Computer Science	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Dental Science	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Economics	1	1	—	—	—	—	2	—	—	—	—	—	—	—	4	1
Electrical Engineering	—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	—
Electronics	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Food and Fabric Science	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
General Studies	—	1	—	—	—	—	3	2	—	—	1	—	—	—	4	3
Geology	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
History	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Law	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Malay Studies	2	1	—	—	—	—	—	—	—	—	—	—	—	—	2	1
Mathematics	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—

SOCIAL DEVELOPMENT

Course	Malaysia		S'pore		Philippines		U.K.		Canada		Australia		U.S.A.		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2. GRADUATE																
Mechanical Engineering	1	—	—	—	—	—	2	—	1	—	—	—	—	—	4	—
Pharmacy	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Politic and Economic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Psychology	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	—
Science and Medicine	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	—
Sociology	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	—
Total Graduate	7	3	—	—	1	—	19	6	4	—	5	—	—	—	36	9
3. NON-GRADUATE																
Accountancy	5	—	—	—	—	—	1	—	—	—	—	—	—	—	6	—
Agriculture	12	—	—	—	—	—	3	—	—	—	—	—	—	—	15	—
Applied Biology	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2	—
Architecture	—	—	—	—	—	—	3	—	—	—	—	—	—	—	3	—
Graphic and Design	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2	—
Building and Construction	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Business Studies	4	—	—	—	—	—	5	2	—	—	—	—	—	—	9	2
Electrical Engineering	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Fine Arts	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Law	—	—	—	—	—	—	3	—	—	—	—	—	—	—	3	—
Management	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Planting Industry	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Public Administration	4	—	—	—	—	—	2	—	—	—	—	—	—	—	4	—
Technical Buildings	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—

SOCIAL DEVELOPMENT

Course	Malaysia		S'pore		Philippines		U.K.		Canada		Australia		U.S.A.		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Teacher Training, Art & Craft	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
T. Training, Domestic Science	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	2
T. Training, Ed. Administrat'n	—	—	—	—	—	—	2	1	—	—	—	—	—	—	2	1
T. Training, Home Economic	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2
T. Training, Malay Studies	6	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—
T. Training, P.E. & Geography	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Veterinary Science	5	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—
Total Non-Graduates	41	—	1	—	—	—	24	6	—	—	2	—	—	—	66	8
4. VOCATIONAL																
Librarian Film & Ci. Cir. T.V.	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Nursing	—	—	—	—	—	—	—	13	—	—	—	—	—	—	—	13
Photography	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2	—
Secretarial Course	—	1	—	1	—	—	—	8	—	—	—	—	—	—	—	10
Stenography	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Total Vocational	—	2	—	1	—	—	2	22	—	—	—	—	—	—	2	26
5. SCHOOL																
Secondary Malay	—	—	47	2	—	—	—	—	—	—	—	—	—	—	47	2
Secondary English	9	—	49	—	—	—	71	16	—	—	—	—	—	—	129	16
Total School	9	—	96	2	—	—	71	16	—	—	—	—	—	—	176	18
Grand Total Govt. Scholarships	57	5	97	3	1	—	120	50	4	—	5	2	—	—	284	60

SOCIAL DEVELOPMENT

APPENDIX X (b)

Overseas Students, Month Ending June, 1971

Non-Government Scholarships

Source of Award and Course	Malaysia M	U.K. M	Canada M	Australia M	U.S.A. M	Total M	T
1. GRADUATE							
(i) B.S.P. Co.							
Mechanical Engineering	—	1	—	—	—	1	1
Total B.S.P. Co.	—	1	—	—	—	1	1
2. NON-GRADUATE							
(i) B.S.P. Co.							
Civil Engineering	1	—	—	—	—	1	1
Electrical Engineering	2	—	—	—	—	2	2
Total B.S.P. Co.	3	—	—	—	—	3	3
(ii) Colombo Plan							
Articulture	1	—	—	—	—	1	1
Public Administration	1	—	—	—	—	1	1
Statistics	1	—	—	—	—	1	1
Veterinary	1	—	—	—	—	1	1
Total Colombo Plan	4	—	—	—	—	4	4
(iii) Commonwealth							
Education Administ'n	—	4	—	—	—	4	4
Total Non Graduate	7	4	—	—	—	11	8
Grand Total Non-Govt.	7	5	—	—	—	12	12

SOCIAL DEVELOPMENT

APPENDIX X (c) Overseas Students, Month Ending June, 1971 Private Scholarships

Course	S'pore		Taiwan		Japan		U.K.		U.S.A.		Canada		N. Zealand		Australia		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. POST GRADUATE																		
Economics	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Civil Engineering	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Physics	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Total Post-Graduate	—	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	3	—
2. GRADUATE																		
Accountancy	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	2
Agriculture	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Animal Husbandry	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Business Administration	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Chemical Engineering	—	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—
Chinese Literature	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Civil Engineering	—	—	12	—	—	—	—	—	—	—	—	—	—	—	1	—	13	—
Commerce	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—
Economics	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Electrical Engineering	—	—	3	—	—	—	1	—	—	—	—	—	1	—	—	—	2	—
Engineering	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2	—
Foreign Languages	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	3	—
Mechanical Engineering	—	—	5	—	—	—	1	—	—	—	—	—	—	—	—	—	6	—
Mining & Metallurgical Eng.	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Pharmacy	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Physics	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Unclassified	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Total Graduate	—	—	37	6	—	—	4	1	1	—	1	2	1	—	2	1	46	10
																	56	

SOCIAL DEVELOPMENT

Course	S'pore		Taiwan		Japan		U.K.		U.S.A.		Canada		N. Zealand		Australia		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	T		T		T		T		T		T		T		T		T	
3. NON-GRADUATE																		
Accountancy	—	—	—	—	—	—	—	2	—	—	—	—	—	—	1	—	1	2
Agriculture	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Archeticture	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	2	—
Bar-at-Law	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	2	2
Business Studies	—	—	—	—	—	—	3	—	—	—	—	—	4	—	—	—	3	4
Commerce & Economics	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Dietetice	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Electrical Engineering	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2	—
Mechanical Engineering	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2	—
Medical Science	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	4	—
Shipping & Export	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Radio & Television	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Teacher Trg. Domestic Science	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—
Teacher Trg. General	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—
Technology	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	2	—
T.V. & Electrical Engineering	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	2	—
Unclassified	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
Total Non-Graduate	—	—	—	1	—	18	6	—	—	—	—	2	4	5	1	26	11	37

SOCIAL DEVELOPMENT

Course	S'pore		Taiwan		Japan		U.K.		U.S.A.		Canada		N. Zealand		Australia		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
4. VOCATIONAL																		
Aeronautical Engineering	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Aircraft Radio Engineering	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Nursing	—	—	—	2	—	—	—	65	—	—	—	—	—	—	—	—	67	67
Secretarial	—	—	—	—	—	—	—	2	—	—	—	—	—	4	—	—	6	6
Total Vocational	—	—	—	2	—	—	2	67	—	—	—	—	—	4	—	—	2	73
5. SCHOOLS																		
Secondary	—	—	4	—	—	—	10	3	—	—	—	—	1	—	2	—	17	3
Grand Total Private	—	—	41	8	1	—	35	77	1	—	3	2	4	8	9	2	94	97

SOCIAL DEVELOPMENT

APPENDIX X (d)

Overseas Students, Month Ending June, 1971

Summary, Government, Non-Government and Private

Type of Scholarships	Location	Secondary			Voc.			N. G's			Graduate			P. G's			Total		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
A. Government Scholarships																			
	Australia	—	—	—	—	—	—	—	—	—	2	5	—	—	—	—	5	2	7
	Canada	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	4	—	4
	Malaysia	9	—	—	—	—	—	2	41	—	—	7	3	—	—	—	57	5	62
	Philippines	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1
	Singapore	96	2	—	—	—	—	1	1	—	—	—	—	—	—	—	97	3	100
	United Kingdom	71	16	2	22	24	6	19	6	4	—	—	—	—	—	—	120	50	170
Total, A		176	18	2	25	66	8	36	9	4	—	—	—	—	—	—	284	60	344
B. Non-Government Scholarships																			
B1. Commonwealth Scholarships	United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4
B2. Colombo Plan Scholarships	Malaysia	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	4	—	4
B3. Brunei Shell Petroleum Co. Ltd. Scholarships	Malaysia	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	3	—	3
	United Kingdom	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
Total, B3		—	—	—	—	—	—	11	—	—	1	—	—	—	—	—	12	—	12
C. Private																			
	Australia	2	—	—	—	—	—	5	1	—	2	1	—	—	—	—	9	2	11
	Canada	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	3	2	5
	Japan	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1
	New Zealand	1	—	—	—	—	—	4	2	4	1	—	—	—	—	—	4	8	12
	Taiwan	4	—	—	—	—	—	2	—	—	37	6	—	—	—	—	41	8	49
	United Kingdom	10	3	2	67	18	6	4	1	1	—	—	—	—	—	—	35	77	112
	U.S.A.	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
Total, C		17	3	2	73	26	11	46	10	3	—	—	—	—	—	—	94	97	191

SOCIAL DEVELOPMENT

APPENDIX XI

Malay Language Teaching In Non-Malay Schools, 1971

Type of School		No. of Schools	No. of Classes	Enrolment			Staff		
				M	F	T	M	F	T
Mission English	7	137	2,787	2,275	5,062	8	23	31	
Chinese	8	133	2,537	2,071	4,608	9	12	21	
Total	15	170	5,324	4,346	9,670	17	35	52	

APPENDIX XII

Results of Examinations — 1971

1. Malaysian L.C.E. 1971 (Malay Medium)

Candidates' Centre	Grade 'A'	Grade 'B'	Grade 'C'	Total Full LCE Passes	In at least One Subject	Failed in All Subjects	Candidates Examined
SMM SMJA	121	101	66	288	40	734	1,062
SMM Muda Hashim	4	1	19	24	3	337	364
SMM Sultan Hassan	9	12	4	25	7	37	69
SMM Ahmad Tajuddin	27	18	32	77	9	184	270
Private Bandar Seri Begawan	13	3	11	27	47	—	74
Private Tutong	2	—	1	3	13	1	17
Private Belait	1	—	—	1	2	—	3
Private Temburong	1	—	—	1	10	—	11
TOTAL	178	135	133	446	131	1,293	1,870

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2. Malaysian L.C.E. 1971 (English Medium)

Candidates' Centre	Grade 'A'	Grade 'B'	Grade 'C'	Total Full LCE Passes	In at least One Subject	Failed In All Subjects	Candidates Examined
SOAS College	79	9	42	130	217	—	347
STPRI	102	8	27	137	255	—	392
Anthony Abell College	86	9	24	119	108	—	227
Perdana Wazir English School	25	1	15	41	80	—	121
St. Andrew's	16	2	8	26	76	1	103
St. George's	13	4	1	18	48	—	66
St. Michael's	43	1	8	52	19	—	71
St. Margaret's	16	2	1	19	56	1	76
St. Angela's	43	3	5	51	26	—	77
St. John's	30	2	4	36	23	—	59
St. Jame's	7	—	—	7	23	—	30
Adult Class Bandar Seri Begawan	3	—	1	4	37	1	42
Adult Class Seria	—	—	—	—	11	—	11
Adult Class Kuala Belait	1	—	—	1	9	—	10
Private Bandar Seri Begawan	—	—	—	—	5	—	5
Private Belait	—	—	—	—	2	—	2
TOTAL	464	41	136	641	995	3	1,639

3. Malaysian Certificate Of Education/G.C.E. "O" Level (Malay Medium), 1971

Candidates' Centre	Grade I	Grade II	Grade III	Total Full MCE Passes	Passes In GCE	Failed In All Subjects	Total Candidates Examined
Maktab Melayu P.S.B.	—	5	109	114	95	141	350
S.M. Arab Hasanah Bolkiah	3	3	17	23	7	4	34
Private Candidates, B. S. Begawan	3	1	47	51	64	104	219
Private Candidates, Seria	—	—	7	7	18	17	42
TOTAL	6	9	180	195	184	266	645

4. Malaysian Certificate Of Education/G.C.E. "O" Level (English Medium), 1971

Candidates' Centre	Grade I	Grade II	Grade III	Total Full MCE Passes	Passes In GCE	Failed In All Subjects	Total Candidates Examined
SOAS College	16	23	74	113	43	26	182
St. George's School	—	1	3	4	20	7	31
St. Andrew's School	1	1	6	8	23	12	43
Anthony Abell College	20	12	30	62	40	1	103
St. Margaret's School	4	1	4	9	32	13	54
St. Michael's School	1	3	4	8	25	3	36
St. Angela's School	17	14	4	35	15	—	50
Private Candidates, B. S. Begawan	—	3	13	16	17	25	58
Private Candidates, Seria	—	—	4	4	4	7	15
TOTAL	59	58	142	259	219	94	572

SOCIAL DEVELOPMENT

5. Cambridge Higher School Certificate/G.C.E. "A" Level, 1971 (English and Malay Mediums)

Candidates' Centre	Full Certificate	Passes in GCE	Failed in All Subjects	Candidates Examined
SOAS College	11	45	1	57
St. Michael's School	3	15	—	18
Maktab Melayu P.S.B.	—	32	—	32
Private Candidate	2	54	5	16
TOTAL	16	146	6	168

Chinese Middle Schools Common Examinations — 1971

6. Chinese Junior Middle Examination, 1971

Schools	Passed			Provisionally Passed			Failed			Total Candidates Examination		
	B	G	T	B	G	T	B	G	T	B	G	T
Chung Hwa Middle School, B.S.B.	11	14	25	5	3	8	—	—	—	16	17	33
Chung Hwa Middle School, Seria	9	10	19	6	4	10	3	—	3	18	14	32
Chung Hwa Middle School, K.B.	13	7	20	1	—	1	—	—	—	14	7	21
TOTAL	33	31	64	12	7	19	3	—	3	48	38	86

7. Chinese Senior Middle Examination, 1971

Schools	Passed			Provisionally Passed			Failed			Total Candidates Examination		
	B	G	T	B	G	T	B	G	T	B	G	T
Chung Hwa Middle School, B.S.B.	8	4	12	1	2	3	—	1	1	9	7	16
Chung Hwa Middle School, Seria	21	3	24	2	1	3	5	—	5	28	4	32
TOTAL	29	7	36	3	3	6	5	1	6	37	11	48

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8. London G.E.C. "O" Level, 1971

Session	Passed	Failed	Total Candidates Examined
January	94	43	137
June	28	42	70
TOTAL	122	85	207

9. London G.C.E. "A" Level, 1971

Session	Passed	Failed	Total Candidates Examined
January	6	18	24
June	11	18	29
TOTAL	17	36	53

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10. London Chamber Of Commerce Examination, May 1971

Stage & Subject	Passed	Failed	Total Candidates Examined
STAGE I			
Typewriting	3	9	12
Shorthand	2	—	2
Book Keeping	4	1	5
STAGE II			
Typewriting	2	9	11
Shorthand	3	8	11
Book Keeping	2	4	6
STAGE III			
Typewriting	2	3	5
Shorthand	—	3	3
Accounting	—	4	4
TOTAL	18	41	59

SOCIAL DEVELOPMENT

11. Royal Society Of Arts Examinations, 1971

Stage & Subject	Passed	Failed	Total Candidates Examined
STAGE I			
Typewriting	14	52	66
Shorthand	1	12	13
Book Keeping	2	20	22
English for Foreigners	—	2	2
English Language	—	2	2
Commerce			
Arithmetic			
STAGE II			
Typewriting	6	15	21
Shorthand	—	3	3
Book Keeping	5	2	7
English for Foreigners	1	2	3
English Language	2	2	4
Arithmetic	1	1	2
STAGE III			
Typewriting	—	7	7
Shorthand	—	3	3
Book Keeping	1	3	4
English for Foreigners	—	5	5
English Language	—	—	—
	33	131	164

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12. City And Guild Examination, 1971

Subject	Passed	Failed	Total Candidates Examined
Mathematics "A"	3	—	3
Mathematics "B"	1	—	1
Practical Mathematics	5	2	7
Engineering Drawing	—	—	—
Engineering Science	3	1	4
Radio and Line Transmission "A"	1	3	4
Radio and Line Transmission "B"	3	1	4
Electrical Engineering Practice	2	7	9
Electrical Principle	—	1	1
Electrical Instruments & Measurements	—	1	1
Advanced Electrical Technology	—	3	3
Telecommunication Principles "A"	4	—	4
Telecommunication Principles "B"	1	1	2
Elementary Telecommunication Practice	2	4	6
Direct Current Machines and Alternative Currents	1	2	3
Written — Alternative Current	3	4	7
Repent Drawing and Processes	1	—	1
TOTAL	30	30	60

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APPENDIX XIII

Adult Education, 1971

Enrolment and Staff (Malay Medium)

Course	Enrolment			Staff		
	M	F	T	M	F	T
Literacy/Basic Education	529	972	1,501	88	31	119
Malay for Non-Malays	35	29	64	5	1	6
Commercial Subjects:						
a) Shorthand	260	125	385	12	—	12
b) Typing	83	179	262	10	—	10
Foreign Languages:						
a) Chinese	49	4	53	1	—	1
b) Japanese	67	9	76	3	—	3
Music	2	9	11	1	—	1
Secondary Education:						
a) Form I	38	20	58	13	—	13
b) Form II	6	45	51	8	2	10
c) Form III	173	181	354	46	1	47
d) Form IV	31	3	34	4	—	4
e) Form V	127	23	150	15	5	20
f) Form VI	52	14	66	10	—	10
Domestic Subjects	—	1,726	1,726	—	23	23
Grand Total	1,452	3,339	4,791	216	63	279

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Adult Education, Examination Results, 1971

Course	Stage	Passes
1. COMMERCIAL SUBJECTS:		
(a) Shorthand	Elementary	33
	Intermediate	20
	Advanced	11
(b) Typing	Elementary	90
	Intermediate	35
	Advanced	43
(c) Book-keeping	Junior	—
	Senior	1
	Advanced	—
(d) Stenography	Junior	1
	Senior	--
	Advanced	—
2. LANGUAGES:		
(a) Chinese	Primary II	4
	Primary IV	--
	Primary VI	--
(b) Japanese	Primary II	2
	Primary IV	—
	Primary VI	--
(c) Malay	Primary II	—
	Primary IV	10
	Primary VI	10
	Form II	9
(d) English	Primary II	123
	Primary IV	98
	Primary VI	84
	Form I	46
	Form II	29
3. Literacy/Basic Education		
	Elementary	317
	Intermediate	355
	Advanced	172

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Adult Education, 1971

Enrolment and Staff (English Medium)

Course	Enrolment			Staff		
	M	F	T	M	F	T
Single Subject						
ENGLISH LANGUAGE						
Primary II	179	146	325	8	4	12
Primary IV	206	91	297	11	—	11
Primary VI	215	86	301	7	6	13
Form I	96	23	119	5	1	6
Form II	40	29	69	3	—	3
Form III	32	5	37	2	1	3
Form IV & V	3	—	3	1	—	1
Total	771	380	1,151	37	12	49
Full Subjects						
Form I	65	26	91	12	—	12
Form II	12	2	14	10	2	12
Form III	61	15	76	15	4	19
Form IV	37	8	45	9	—	9
Form V	99	29	128	22	9	31
Form VI	43	5	48	8	3	11
Total	317	85	402	76	18	94
Other Subjects						
Typing	66	277	343	4	4	8
Book-keeping	33	28	61	2	—	2
Shorthand	1	54	55	2	—	2
French	23	6	29	—	1	1
Needlework	—	16	16	—	1	1
Total	123	381	504	8	6	14
Grand Total	1,211	846	2,057	121	36	157

(b) Medical and Health Services

Administration

There was no Assistant Minister for Medical and Health affairs during 1971.

The Director of Medical Services is the Head of the Medical and Health Department and is responsible for the Clinical and Preventive Public Health Services within the State.

He is, in addition, the Registrar of Births and Deaths, Registrar General of Adoptions, Registrar of Medical Practitioners and Dentists and the Registrar of Midwives. He is also the Licensing Officer under the Poisons Enactment. He is gazetted as the Port Health Officer and is directly responsible for administering the following laws in Brunei:—

1. The Quarantine and Prevention of Diseases Enactment.
2. The Births and Deaths Registration Enactment (1923).
3. The Medical Practitioners and Dentists Enactment (1956).
4. The Midwives Enactment (1955).
5. The Dangerous Enactment (1956).
6. The Poisons Enactment (1956).
7. The Nurses Registration Enactment (1961).
8. The Adoptions Enactment (1961).

The Director of Medical Services is responsible for initiating policy for the progressive development of the Department. Also, as head of planning, programming and implementation of the National Health Programme, in conjunction with the Commissioner of Development.

The Senior Staff of the Medical and Health Department in 1971 included, in addition to the Director of Medical and Health Services:—

- a) 7 Clinical Specialists
- b) 1 Medical Officer of Health
- c) 1 School Health Officer
- d) 20 Full-time Medical Officers
2 Part-time Lady Medical Officers
- e) 4 Dental Officers
- f) 1 Pharmaceutical Chemist
- g) 2 Matrons

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- h) 1 Sister Tutor
- i) 1 Clinical Tutor
- j) 1 Midwifery Tutor
- k) 2 Physiotherapists
- l) 1 Malariologist

Financial Provision

Expenditure for 1971 was under Specific Head 29 of the State of Brunei Estimates of Revenue and Expenditure. The overall provision was B\$9,059,921. This included B\$5,643,484, estimated expenditure for personnel.

Under Development Subhead 109 the sum of B\$2,909,251 was provided for Medical Development projects.

It is of significant interest to observe the steady increase in expenditure required to maintain the Medical Services at a reasonably efficient level. Provision during the last five years is shown in the following table:—

Year	Subheads	Vote	Development
1967	29	B\$7,082,815	B\$2,506,086
1968	29	7,978,365	2,730,000
1969	29	7,979,450	5,700,000
1970	29	8,493,131	3,677,375
1971	29	9,059,921	2,909,251

In addition to the above a sum of B\$200,000 was provided for the training overseas of Medical Department personnel under Subhead 2/6 "Service Training".

As in past years, increased expenditure has followed professional progress and additional construction. The maintenance of modern methods of treatment has involved considerable added expenditure.

When such methods, because of the State's limitations, are not available within the State, entitled patients have been sent abroad for treatment as in the case of major cardiac surgery, for radiotherapy and the occasional Renal Unit patient.

General Medical Services

The General Medical Services in the State are provided through several hospitals, outdoor clinics, travelling dispensaries, and a Flying Medical Team.

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The State is divided into four Administrative Districts. Of these, Brunei District includes the Capital, Bandar Seri Begawan in which is located the Headquarters of the Medical and Health Department and the largest State Hospital. Most Clinical Specialists are attached to the latter and visit other parts of the State periodically.

There is a busy District Hospital of 108 beds at Kuala Belait in Belait District; and a small District Hospital of 16 beds at Bangar in Temburong District.

A Doctor visits the District Hospital at Bangar in Temburong District regularly.

The main State Hospital is the General Hospital, Bandar Seri Begawan, and provides a full range of up-to-date medical facilities. An additional male Surgical Ward, completely air-conditioned was opened in 1971. An extension of the Renal Unit and a small medical emergency ward were equipped. The General Hospital, Bandar Seri Begawan now has 246 beds.

A modern Mental Unit was opened in 1968. This only has 14 beds but provides up-to-date therapeutic facilities.

A new Administrative Centre for the Anti-Tuberculosis Project has been completed in close proximity to the T.B. Wards.

The New District Hospital at Kuala Belait was almost completed by the end of 1971. This will provide 185 beds when fully operative, and will include a mental unit of 28 beds well designed to provide everything required for the modern treatment of mental patients. Specialist Clinical Services are available at Bandar Seri Begawan where there are two Specialist Physicians, a Specialist Surgeon, an Ophthalmologist, an Obstetrician and Gynaecologist and an Anaesthetist.

One of the Specialist Physicians is a Specialist Chest Physician.

A Specialist Surgeon was appointed in 1970, to the District Hospital, Kuala Belait.

Female Clinics at the General Hospital and at the District Hospital, Kuala Belait, were in the care of Lady Medical Officers.

Treatment of mental patients is in the hands of a Medical Officer experienced in this speciality who has also attached to him an experienced Mental Health Sister. Two members of the Brunei Nursing Staff who had undergone a year's training in Mental Health Nursing in the United Kingdom rejoined the Department in 1968 and have since been attached to the Mental Wards for duty.

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Movement of patients to the main hospital centre is by ambulance along the main road and subsidiary roads; and by outboard engine boats along the main waterways. From the remote kampongs (villages), patients are lifted to the nearest hospital by helicopter provided by the Royal Brunei Malay Regiment. The Flying Medical Team is provided by the Medical and Health Department. The administration of the Flying Doctor Service is under the direct control of the Director of Medical Services.

The Brunei Shell Petroleum Company Limited makes an important contribution to the care of the sick of the State. The Company has a well staffed hospital at Kuala Belait of 85 beds. In the main, the Brunei Shell Petroleum Company Limited also provides public health services within its area. Excellent co-operation between the Brunei Shell Petroleum Medical Department has always been maintained.

The Flying Doctor Service

This Service, conducted by helicopter, was introduced in 1965 and has made possible the provision of modern medical facilities to all kampongs (villages) in the remote parts of the State. Many of these were previously, completely isolated for long periods in every year.

Until the first half of 1971 the Flying Doctor Team consisted of a doctor, midwife and nurse. It has latterly been found satisfactory to send out a Flying Medical Team with an experienced Senior Hospital Assistant and a nurse trained in midwifery. All very sick patients and others requiring hospital treatment are immediately evacuated to the General Hospital, Bandar Seri Begawan or to the District Hospital at Kuala Belait.

The Service continues as regular flights three times a week. Emergencies are attended to as they occur.

The State Road System has considerably improved since 1965. A number of kampongs no longer need to be visited by the Flying Medical Team. This has made it possible to complete the circuit of the ulu (outlying) kampongs (villages) in four weeks. It previously took eight weeks.

The basis of the organisation of the Service is the division of the 268 rural kampongs (villages) into 24 groups. In each group one kampong is called the Key Kampong and is the main kampong visited: the remaining kampongs feed their patients to the Key Kampong. However, exigencies permitting, some of the feeding kampongs are also visited.

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Two days before each flight the public is informed, by radio announcement, when and where the Flying Medical Team will visit so that patients and pregnant women can be assembled. A good radio intercommunication system has been established. Information about medical emergencies is readily received and can be attended by emergency helicopter flights. The internal road system is making rapid progress in development, and many kampongs have been removed from the Flying Medical Team programme. In time it should be necessary only to bring in emergency cases.

Training

The personnel required to maintain the Medical and Health Department at its present standard cannot come from the State of Brunei for several decades at the present rate of recruitment and training. Medical Officers in particular will have to be recruited overseas. Two Brunei Doctors, however, commenced serving in 1968 and were attached to Specialist Officers in order to initiate training for specialist careers. This is the pattern to be followed in the future, in order to ensure coverage for specialist requirements. In August, 1969, a third Brunei Doctor returned to the State.

In 1970 two Brunei Doctors returned for service in the State; and one left for the United Kingdom to take up a course of study in Public Health. The latter returned to Brunei in 1971 and became the first Bruneian Medical Officer of Health.

Another Bruneian Doctor went to London in 1971 to study Public Health and to obtain the D.P.H.

It is hoped that in 1972 two Bruneian Doctors will go overseas to study for specialist qualifications in Medicine and in Surgery.

A Brunei Scholarship student has taken over the bacteriological laboratory work as a non-medically qualified Bacteriologist. Another qualified in 1971 as a Biochemist. Later in 1971 he was in a hospital laboratory attachment in the United Kingdom before returning to Brunei to join the Medical Department.

A postgraduate Hospital Assistant (male nurse) succeeded in obtaining the Diploma of Clinical Tutor at the Royal College of Nursing in London. He returned to Brunei to take up the post of Tutor in Nursing, a valuable asset.

A number of scholarship students and some private students are training as nurses abroad. The policy is that they return to Brunei as soon as they have qualified in general nursing and in midwifery.

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Within the State is a School of Nursing in the charge of a Sister Tutor. There is also a School of Midwifery in the care of a qualified Midwifery Sister Tutor.

The Medical Department Overseas Training and Scholarship Committee makes recommendations to Government periodically of various medical staff for postgraduate qualification courses as Ward Sisters, Psychiatric Nurses and in other nursing specialties. School Dental Nurses and Dental Mechanics are usually trained at the Dental Training School in Penang.

Laboratory Technicians and Public Health Inspectors are currently under training in Singapore.

A highly successful course of training for Junior Health Inspectors was conducted in the State in 1970 by a W.H.O. Consultant. Twelve Brunei Officers whose educational standard was insufficient for the Royal Society of Health Diploma Course for Public Health Inspectors received comprehensive instruction in all aspects of Environmental Sanitation. All were successful in the terminal examination and were awarded Departmental Diplomas.

The State's limited population makes it obligatory to recruit most senior grades of Medical Department staff from abroad

The Dental Services

In addition to the main Dental Clinics at the General Hospital, Bandar Seri Begawan, and at the District Hospital, Kuala Belait, there are many school dental clinics in operation, 15 of which were brought into use in 1966, and are fully equipped.

Many dental patients, young and old, are brought to Bandar Seri Begawan for dental treatment under the auspices of the Flying Medical Team.

Refresher Courses for Dental Mechanics have been organised with the co-operation of the Dental Training School in Penang. Officers are sent to these when necessary.

One Dental Officer was sent to the United Kingdom for postgraduate training and is still under training.

A Brunei Government Scholarship student is studying Dentistry in Australia and should qualify in 1972.

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School Health Service

This Service was started in 1967 under a very experienced School Medical Health Officer who continued with this through 1971. This is basically a continuation of the Maternal and Child Care Services and will eventually result in continuous medical documentation for each individual in the State.

The importance of this service will be appreciated from the following data. In 1971, 42,830 children attended various types of school with an additional 412 in the State Religious Schools.

It is estimated that about 70% of all pupils have access to this service. The remainder, especially in the more remote rural areas are cared for by the Flying Medical Team.

It is envisaged that $\frac{1}{3}$ of all school children will be medically examined every year so that the whole school population will be routinely covered in three years.

School Health Work is continued with the following objectives:—

1. Inspection of environmental sanitation
2. Medical examination of pupils
3. Follow-up of defective children
4. Correction of defects
5. Control of communicable diseases
6. Health Education

During 1971, the general overall health of school children continued satisfactory.

The average height/weight table for Brunei children, previously prepared by the School Medical Officer helped in the detection of deviations from normal average development.

A pilot study of the effect of supplementing diet with a protein food was carried out in one school (Sekolah Menengah Hassanal Bolkiah). It was found that 84% of the children under supervision increased in weight in the course of a month by from 2 — 8 lbs.

Dental defects are the commonest defects found. As the School Dental Service develops more school children will reach a satisfactory dental standard. New schools being built, have a dental treatment room included in their design.

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Some categories of children, notably Chinese, have defective vision. These are referred for refraction. Where children cannot afford to purchase spectacles Government often does this for them.

Some children with operable congenital heart lesions have had successful surgical treatment in Australia at Government expense, or with partial Government aid.

The work of the School Health Service has been greatly facilitated by the co-operative assistance of the Education Department.

The School Health Service was helped in 1971 by talks and demonstrations by a Health Education Technician. This addition has been very well received by pupils and teachers.

Malaria and Malaria Eradication Project

Malaria has been recorded since 1921 as a serious problem in parts of Brunei, although it has been reported to be slight or absent from some other parts.

A systematic malaria survey was done in 1952 and 1953 by an Australian Malaria Survey Team, and Specialists from the World Health Organisation. Following this, Government carried out anti-malaria activities, which included DDT house spraying and anti-malarial drugs distribution, from 1953 to 1962. In 1962 W.H.O. recommended to Government the institution of a National Malaria Eradication Project with assistance from W.H.O. An agreement was signed between the Government and W.H.O., on 7th May, 1962. A Malaria Adviser was assigned to Brunei by W.H.O. on 20th May, 1962. In addition, a W.H.O. Sanitarian was sent to Brunei as a Junior Adviser. During 1966 the National Malaria Eradication Project was actively engaged in the "Attack Phase" of eradication which continued until the end of the year. In 1967 the State of Brunei entered into the "Consolidation Phase". The State is still in the "Consolidation Phase".

Government approved a total expenditure of B\$5,504,670 for a five-year period 1963 to 1968.

The Project Staff were originally assisted by two W.H.O. Advisers (one of them a Sanitarian), who were responsible for the original inception and administration of the National Malaria Eradication Project. It should be recorded that the Junior Adviser (a Sanitarian) was also of great service to the Medical

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and Health Department in the training of Junior Health Inspectors in General Hygiene. From the 1st January, 1968, W.H.O. Advisers were completely withdrawn from the State. The National Malaria Eradication Project continued its excellent functions with its own comprehensive staff.

On the 31st December, 1971, the staff engaged in epidemiological activities and in direct anti-malarial work, were 74, including six daily paid labourers.

The National Malaria Eradication Project is provided with a Headquarters building including offices, laboratories, map making room and a conference room.

It has also ample vehicles and riverine transport.

Work Done

The National Malaria Eradication Project is still referred to by this name which is convenient because it is well known. Radio announcements of its visits to various areas in the country are therefore understood by all.

It has however been an integrated section of the Preventive Health Service of the State since the beginning of 1970.

Since 1971, as in the previous year, careful vigilance was maintained throughout the State for the advent of any cases likely to be malaria or of filariasis or of other epidemiological interest.

All imported labour entering the State continued to be screened by blood examination.

Barrier house spraying with DDT was carried out to avoid the re-introduction of malaria into Brunei from neighbouring territories. Field anti-malarial activities were based on the division of the State into (a) non-malarious areas (or areas from which malaria had been eradicated) with an estimated population of around 119,600 and of (b) former malarious, or potentially malarious areas, with a population around 16,700 in 135 rural kampongs.

15 cases of malaria were discovered in 1971. Of these one was labelled "indigenous". The others epidemiological investigated were "imported" except for two "relapses" and one "cryptic". All were followed up with intensive preventive measures and investigations.

Aedes Aegypti

Dr. MacDonald of the School of Tropical Medicine and Hygiene, London, surveyed the problem of this vector in the State in 1970.

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In 1971 Professor C.Y. Chow, Adviser in Vector Biology and Control, visited Brunei twice in connection with a field study of biting midges, and *Aedes Aegypti* control. During his visits he held a brief refresher training course on vector control, and the control of rodents, for health inspectors and entomology technicians.

Following the visit was instituted a year's field study on (1) the bionomics of biting midges and (2) the "control" of *Aedes Aegypti* by using "Abate" insecticide.

Abate showed promise. The commonest biting midge in the State was *Styloconops Spinosifrons*.

Filariasis and its control were actively pursued in 1971. Two positive cases were found of infestation with *BRUGIA MALAYI* in a total of 1,329 blood smears.

All kampong houses have M.E.P. number plates for reference purposes. In 1971, 683 new plates and replacements were fixed.

General Public Health Cover

The State of Brunei is constantly exposed to the danger of entry, or emergence, of cholera. A high standard of immunisation is maintained throughout the State. The danger will, however, persist until sophisticated sanitation exists throughout, and until an adequately treated water supply is everywhere available. Annually, before the known State celebration, cholera immunisation programmes are instituted.

Also, the Flying Medical Team endeavours to maintain as near as possible 100% cover in the remote kampongs.

Typhoid and Paratyphoid Fever

Thirty cases were reported in 1971. Most of these were concentrated in Kampong Ayer and nearby kampongs. Immediate epidemiological investigations were carried out. In a group of eight cases occurring between March and April, 1971, it was found that the son of a shopkeeper licensed to sell ice-cream was a confirmed case of typhoid fever. The proprietor was making his own ice-cream in addition to selling the manufactured product. This was stopped immediately.

It has not always been possible to detect the source of infection, but unlicensed hawkers are suspected. These exist inspite of controls exercised.

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Port Health Work

With increasing traffic between Brunei and the outside world, 1971 was a very busy year for Port Health Staff. In addition to the usual ports of entry the British Shell Petroleum Company Limited opened their off-shore terminus in Seria where tankers come to export crude oil. These ships require inspection. Health staff are transported out to them.

During 1971, 3,272 aircraft arrived at Bandar Seri Begawan Airport. 45,342 passengers disembarked. Of these 805 persons were kept under surveillance for cholera or smallpox after entry into Brunei.

623 ships arrived at Bandar Seri Begawan Port in 1971, and 350 at Kuala Belait. All were given pratique. 12,154 passengers disembarked at Bandar Seri Begawan.

A close watch has been maintained during epidemic periods on all incoming food supplies. In this, close co-operation has been maintained, and always received, from the Marine Department.

The State Agricultural Department's Veterinary Officer maintains close contact with the Medical and Health Department, thereby co-ordinating action in the control of importation of animals which may harbour diseases communicable to mankind, such as RABIES.

The following communicable diseases were reported during 1969 to 1971:—

Notification of Infectious Disease

Diseases	1969	1970	1971
Cholera	—	24	—
Typhoid, paratyphoid fever and other Salmonella infections	84	65	30
Bacillary dysentery and amebiasis	77	24	32
Enteric and other diarrhoeal diseases	102	60	25
Tuberculosis (all forms)	161	189	242
Leprosy	2	1	—
Diphtheria	31	11	—
Tetanus	3	—	1
Whooping cough	2	4	1
Sepsis of pregnancy	—	—	—

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Acute poliomyelitis	2	—	—
Measles	32	408	544
Infectious hepatitis	2	2	6
Chicken-pox	204	489	645
Mumps	42	300	894
Gonococcal infections	56	84	47
Syphilis	1	1	1
Filarial infection	98	5	6
Malaria	4	10	15
Trachoma	12	1	—
Rubella	1	1	22
Scarlet fever	1	1	1
Puerperal fever	1	1	—

Water Supply

Piped water supplies are available at the bigger population centres but much work is being done to enhance these for the capital Bandar Seri Begawan, Kuala Belait and Seria.

For Bandar Seri Begawan and neighbouring areas the water supply will eventually be augmented through the Tutong Water Scheme.

Work on this, already advanced, has regrettably been temporarily Suspended for administrative reasons. It is considered that about 40% of the total population live in kampongs without "protected" water supplies.

Water rationing was observed during the worst supply period.

Although the Public Works Department is responsible for the public water supply throughout the State it is the duty of the Medical and Health Department to inspect and examine the water supply, as required, and to recommend action necessary to protect health.

Sewerage

Two large sewerage schemes were started in 1968 for the larger urban areas of Kuala Belait, Seria and Bandar Seri Begawan. These were completed in 1971. The next step is to connect individual users.

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At present, new houses, especially those built under Government auspices are required to have septic tanks built. Primitive methods of disposal of night soil are used in the more remote areas. Bore hole latrines have been constructed in a number of places by the Health Department.

Garbage disposal is by collection, dumping and by neutralisation by burning off.

Garbage disposal is by collection, dumping and by neutralisation by burning off.

Maternity Services

Active ante-natal and post-natal services are maintained throughout the State. These are in the care of qualified Health Sisters, assisted by Midwives and Health Nurses. The welfare of infants is also supervised at these clinics, in which the usual immunisations are provided.

Maternal and Child Health Clinics are both static and mobile. Travelling Health Clinics were conducted at 23 kampongs in Brunei District; nine in Temburong; 20 in Tutong and six in Belait District.

It is gratifying that there are progressively more attendances at ante-natal clinics. In 1970, 29,459 pregnant women attended; in 1971 the number rose to 31,293. This shows a greater appreciation and use of the medical facilities available.

Pregnant women attending ante-natal clinics have a general medical examination in the early stages of pregnancy. Primigravidae are seen in later pregnancy for pelvic assessment.

There was a good response to the Medical Department Maternity Service in 1971.

Maternal Mortality

There were four registered deaths in 1971 in women during pregnancy and childbirth. The maternal mortality was 0.78.

There has, on the whole, been an appreciable improvement in these figures as will appear from the following table:—

Year	No. of Maternal Deaths	Maternal Mortality Rate (per 1000 live-births)
1969	7	1.50
1970	6	1.25
1971	4	0.75

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The following tables summarise the maternity and child welfare work carried out in the State during 1971:—

Attendances of Pregnant Women at Health Clinics

Urban Area

No. of attendances per session	Number of sessions held			
	B.S.B.	Seria	K. Belait	Total
Over 20	221	50	49	320
Total No. of sessions	221	54	49	324
Total No. of attendances	13,614	2,815	3,922	20,351
No. of attendances per session	61.6	52.1	80.0	62.8

Rural Area

No. of attendances per session	Number of sessions held					Total
	B.S.B.	Kg. Ayer	Temb.	Tutong	Belait	
Over 20	43	73	6	34	1	157
15 — 19	20	28	15	16	7	86
10 — 14	17	—	35	26	12	90
5 — 9	40	—	71	70	26	207
1 — 4	26	—	66	39	39	142
Total No. of sessions held	146	101	193	183	57	682
Total attendances	2,929	3,999	1,435	2,110	469	10,942
No. of attendances per session	20.1	39.6	17.4	11.5	8.2	16.0

Deliveries Under Supervision

District	Total No.* of births	No. of deliveries		Total	%
		In hospital	by midwives		
Brunei	3,022	983	1,704	2,687	88.9
Temburong	239	—	85	85	35.5
Tutong	555	—	269	269	48.5
Belait	1,399	872	350	1,222	87.3
Total	5,215	1,855	2,408	4,263	81.7

* Including still-births

The total number of registered births in 1971 was 5,181. This therefore means that 81.74% of all registered births were under the supervision of the Medical and Health Department.

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Attendances at "Child Health Clinics" have been very satisfactory in 1971. A total of 86,340 attendances was recorded. This permits young children and infants to be immunised against the common infectious diseases, a service which is also performed in remote areas by the regular Medical Team. Thus:—

Small-pox		Poliomyelitis	
Primary	3,484	1st dose	3,609
Revaccination	1,604	2nd dose	3,109
		3rd dose	2,789
D.P.T.		Booster	1,901
1st does	4,228		
2nd dose	3,666	B.C.G.	
3rd dose	3,505	H.M.P. Test	1,646
Booster	2,138	Neg. reactor	1,030
		BCG given	5,289

Causes of Deaths In the State

Causes of Deaths	Brunei	Tutong	Belait	Temb.	Total
1. Tuberculosis, all forms	18	3	15	1	37
2. All other infectious disease	5	5	2	1	9
3. Cancer, all forms	34	—	14	—	48
4. Diseases of circulatory system*	55	—	50	—	105
5. Pneumonia + bronchitis	19	—	12	—	31
6. Diseases of digestive system	41	—	10	1	52
7. Diseases of genito-urinary system	10	—	2	—	12
8. Complication of pregnancy	4	—	—	1	5
9. Congenital Malformation	6	—	4	—	10
10. Diseases peculiar to infancy	39	—	14	—	53
11. Motor vehicle accidents	2	—	6	1	9
12. Other accidents	13	2	13	2	30
13. Others/Unknown	183	2	42	3	230
14. Uncertified	41	86	12	31	170
Total	470	94	196	41	801

* Including "Vascular Lesion affecting Central Nervous System".

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Note on Medical Department Development

A short note is necessary to explain the sequence of constructional development within the Medical Department.

In 1963/1964 the most important requirement was the immediate enhancement of the facilities available at the General Hospital in the Capital Bandar Seri Begawan. 40 beds were added including new Maternity Wards and new First Class Wards. The Medical Stores were enlarged. Consulting Rooms for Specialists were constructed and an additional Dental Clinics with Stores. Another Pathological Laboratory was built. A Doctor's Common Room was provided.

In 1971 an additional air-conditioned Male Surgical Ward of 20 beds was opened.

The next requirement was the replacement of the old hospital at Kuala Belait with a modern hospital. Planning for this construction was then proceeded with. This new hospital of 185 beds has been virtually completed and will be taken into commission when all equipment has been received and installed.

Having arranged this provision, attention was turned towards the buliding of a hospital for Tutong District. This was planned with all the service requirements such as pathological laboratory, operating theatre, maternity unit, dental department, x-ray department, etc. for a moderate sized hospital. At present, however, the allotted sum for expenditure permitted the construction of only one polyvalent "ward" which is in fact a unit of six small independent wards. Provisional planning provides for similar ward additions, on site, up to 160 beds. This will present no problem as the construction is of bungalow type. The next step in the near future will be the planning and construction of an adequate and modern hospital with all modern facilities for the Capital Town, Bandar Seri Begawan.

There is also a need for an improved small hospital at Bangar Town in Temburong District. This has also been recommended for construction.

(c) Town and Country Planning

Administration

During the year the Government decided to create a separate Town and Country Planning Department with effect from January 1972.

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In terms of staff there was a contraction in numbers of technical staff in the Town Planning Office. On the professional side the arrival of and services of a well qualified V.S.O. planner has been of considerable assistance.

Policy

The aim of the Government is to provide a service which will prepare physical planning schemes for short, medium and long term development in the urban and rural areas in order to promote co-ordinated, orderly, safe, healthy and economically viable towns and villages, with adequate transportation networks to give the ease of mobility so necessary in present times.

Legislation

Brunei has no town and country planning legislation. A draft Enactment has been prepared and is under consideration by the Government. In addition a short enabling Enactment has also been prepared and is being considered, which would give interim powers for positive planning and development control whilst the more detailed legislation is being considered.

Rural Planning

Very little rural planning has been done in Brunei. The Town Planning Office advises the Commissioner of Lands on applications for land subdivision in respect of planning considerations such as access, land use and plot size. The office also advises on land reservations in rural areas for Government purposes.

Urban Planning

Plans for Land Use Zoning for some central areas of the capital town, Bandar Seri Begawan, have been prepared and are under consideration.

A Planning Scheme for the seaport town of Muara has been approved by the Council of Ministers.

A preliminary study for the development of the Central Business District of Bandar Seri Begawan has been given approval in principle by the Municipal Board and is now being considered by the Government.

A series of Planning Standard are being prepared: the first three deal respectively with:—

- (a) Roads and other Transportation Corridors,
- (b) Residential Flats,
- (c) School Sites.

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Shopping centre layouts have been prepared for rural population centres at Tutong, Sengkurong and Lumut. Work is progressing on other similar layouts for other areas.

It is expected that the preparation of plans for the future main road network for Bandar Seri Begawan will be completed during the first half of 1972.

Bandar Seri Begawan lacks a defined industrial area with a result that industrial activities are spread in a sporadic, haphazard manner all over the town, are intermingled with other uses and are particularly detrimental to the amenities of the residential areas. Consideration is being given to a feasibility report by a firm of consulting engineers on a proposed industrial area on a periurban site.

A survey of long term development requirements of Government Departments at Bangar Town has been completed and will form part of the basis for a new urban planning scheme for the town.

Infrastructure

Significant progress continues to be made in the establishment of a state-wide infrastructure of public services. During 1971 work has steadily continued on a road programme, sewerage systems and major water supplies. Significant expansions of the electricity and telecommunication systems have also been made. The new deep sea port at Muara and the new international airport at Bandar Seri Begawan are progressing towards completion.

Development Control

The Town Planning Officer as a member of the Municipal Boards of Bandar Seri Begawan, Kuala Belait/Seria and Tutong has continued to advise the respective Boards on development control, land subdivision and other planning matters. Significant and useful progress has been made in respect of the control of land subdivision.

Advice is regularly given to all Departments of the Government on planning matters, in particular to the Lands Department on applications for changes of land use in the special conditions of land title and on proposal for access to land.

Exhibition

The permanent development exhibition housed in the offices of the Language and Literature Bureau continues to be of great interest to the people of Brunei and to overseas visitors. The exhibition has models, maps, plans, photographs and perspective drawing of major development projects in the State.

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(d) Social Welfare

The total number of staff in 1971 were 29. The new staff were as follows:—

Supervisor of Youth Centre
Controller of Youth Movement
Three Welfare Workers

Welfare Work

There were 240 people receiving financial assistance from this department in 1971. This monthly financial assistance is based on the thorough investigation carried out by the welfare workers. Those whose cases merit financial assistance will be forwarded to the State Secretary for approval. These financial assistances will be reviewed from month to month and if the recipients were found to have other sources of income then their monthly allowances will be automatically discontinued.

The amount spent in 1971 for financial assistance on needy families, charitable and voluntary organisations were as follows:-

Needy families	\$73,990.00
Community Service Council	20,000.00
Old Persons' Home Seria	10,000.00
Girl Guide Association	1,500.00
Boy Scout Association	4,000.00
Committee for the orphans	500.00
Brunei Students Union in U.K.	734.00

This department also took step to rehabilitate the blinds in the State. At present there were three blind pupils overseas. Two of them were at Gurney Training Centre at Kuala Lumpur and one girl is at St. Nicholas' School for the Blind in Penang.

Emergency Relief

The actual expenditure for emergency relief under Special Expenditure was \$23,736.90 in 1971.

Youth Services

Until the end of 1971 there were 98 youth associations registered. 87 of these youth associations have general activities such as social, sports, culture and economics whereas eleven of them devoted purely on sports activities.

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Visit to the youth associations premises throughout the State was made by the acting Supervisor of Youth Movement and the Field Officer until the end of July and in August 1971 a new Controller of Youth Movement took over the duty of visiting the youth associations. Any youth associations found to be inactive were revitalised and given opportunity to step up their activities and rearrangement of the programmes with the help from youth workers.

Two of the youth associations were dissolved early in the year, but one of them was re-registered and being approved by the State Registrar of Societies.

Youth Centre

The youth centre since its opening were daily open to the members of youth associations in the State beginning from 7.30 a.m. till 9.00 p.m. Many visiting youth associations from outside the State were making use of the hostels during their visit to the State at the invitation of the local youths.

In 1971 only one youth association was being given assistance to buy furniture.

Youth leadership forum were being organised for the first time by the State Social Welfare Department on October, 8, 1971.

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(e) Pensions

Pensions for the whole State are authorised under the State Pensions Ordinance 1954 (No. 10 of the year 1954) and payments have been made since 1st January, 1955.

The State Pensions Ordinance provides:—

- (a) Old Age Pensions.
- (b) Pensions for the blind and allowances for their dependants.
- (c) Allowances for dependants of lepers while they undergo treatment in any Leper Settlement or place approved by the Director of Medical Services.
- (d) Allowances for dependants of mental patients under Lunatic Enactment whether detained in Mental Hospital or under the care of relatives or friends.
- (e) Pensions for disabled.
- (f) Other pensions and similar allowances may be decided by the Sultan in Council from time to time under section 8 of the Ordinance.

No ordinance exists to enable payment of pensions to be made under (e) and (f) above.

As from 1st September, 1971 the Schedule of State Pensions has been amended as follows:—

for \$ 20.00 read \$ 25.00

for \$ 10.00 read \$ 12.00

for \$100.00 read \$125.00

The arrears of pensions for the months of September, October and November, 1971 were paid in December, 1971.

Statistics

Old Age Pensions

District	Pensioners	Paid	Arrears for Sept.-Nov. 1971	Total Amount
Brunei & Muara	2,685	\$ 626,757.50	\$38,100.00	\$ 664,857.50
Belait	857	196,100.00	11,952.50	208,052.50
Tutong	1,035	241,110.00	14,742.50	255,852.50
Temburong	244	58,535.00	3,612.50	62,147.60
Total	4,821	\$1,122,502.50	\$68,407.50	\$1,190,910.00

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Number of pensioners who died within the year	...	179 persons
Number of applicants rejected	111 persons
Number of successful appeal	... ..	2 persons
Number of applicants examined by doctor	... ..	74 persons
Number of persons passed medical examination and reached the required age in 1971	... ..	328 persons

Pensions for the blind and allowances for their dependants

District	Pensioners & Dependants	Payment	Arrears	Total Amount
Brunei & Muara	78 & 61	\$28,212.50	\$1,705.00	\$29,917.50
Belaït	20 & 10	7,060.00	398.75	7,558.75
Tutong	16 & 7	4,900.00	300.00	5,200.00
Temburong	8 & 4	2,450.00	150.00	2,600.00
Total	122 & 82	42,622.50	2,553.75	45,176.25
Number of Blind Pensioners who died within the year	...	4 persons		
Number of persons medically examined	... ..	6 persons		
Number of successful medical examination	... ..	6 persons		

Allowances for dependants of persons suffering from Hansen disease

District	Lepers & Dependants	Payment	Arrears	Total Amount
Brunei & Muara	—	—	—	—
Belaït	2 & 10	\$612.50	\$37.50	\$650.00
Tutong	1 & 1	245.00	15.00	260.00
Temburong	—	—	—	—
Total	3 & 11	\$857.50	\$52.50	\$910.00

Allowances for dependants of Mental Patients

District	Mental Patients & Dependants	Payment	Arrears	Total Amount
Brunei & Muara	6 & 24	\$4,725.00	\$225.00	\$4,950.00
Belaït	3 & 11	1,960.00	120.00	2,080.00
Tutong	1 & 2	612.50	37.50	650.00
Temburong	—	—	—	—
Total	10 & 37	7,297.50	382.50	7,680.00
Number of Mental Patients who died within the year	...	1 person		

SOCIAL DEVELOPMENT

Total of all pensions and allowances

Type of Pensions and Allowances	Pensioners & Dependants	Payment	Arrears	Total Amount
Old age	4,821 & —	\$1,122,502.50	\$68,407.50	\$1,190,910.00
Blind	122 & 82	42,622.50	2,553.75	45,176.25
*Dependants of Lepers	3 & 11	857.50	52.50	910.00
*Dependants of Mental Patients	10 & 37	7,297.50	382.50	7,680.00
Total	4,956 & 130	\$1,173,280.00	\$71,396.25	\$1,244,676.25

* Payable only to the dependants.

Racial Grouping of Recipients of Pensions and Allowances

Racial Group	Old Age	Blind and Dependants	Dependants of Lepers	Dependants Mental Patients	Total Pensioners & Dependants
Malay	3,681	96 & 69	—	25	3,777 & 94
Dusun	312	11 & 6	11	2	323 & 19
Murut	32	4 & 1	—	—	36 & 1
Chinese	652	7 & 5	—	—	659 & 15
Iban	97	4 & 1	—	—	101 & 1
Javanese	21	—	—	—	21 —
Indian	10	—	—	—	10 —
Pakistani	1	—	—	—	1 —
Japanese	1	—	—	—	1 —
Arab	3	—	—	—	3 —
Punan	6	—	—	—	6 —
Tagal	2	—	—	—	2 —
Eurasian	1	—	—	—	1 —
British	1	—	—	—	1 —
Kadazan	1	—	—	—	1 —
Total	4,821	122 & 82	11	37	4,943 & 130

The State Pensions Department is administered by the Controller of Pensions and his deputy and the daily work in the Department is the responsibility of the Deputy Controller who is assisted by a small number officers in the Head Office. The functions of this office embrace, among other things, the scrutiny of applications for pensions, preparing forms and distributing payment through District Pension Officers under the charge of District Officer. The District Pension Officer will distribute them to the Penghulus and Ketua2 Kampong who will finally pay them to the pensioners in a number of kampong under their charge.

The staff for 1971 are:—

- 1 Controller of State Pensions
- 1 Deputy Controller of Pensions
- 1 Senior Pensions Officer
- 1 Pensions Investigating Officer
- 6 Pensions Officers
- 1 Clerk Grade "A"
- 2 Attendants

SOCIAL DEVELOPMENT

(f) Museum

General Review

1971 was a year of Preparation for the Official Opening of the Brunei Museum by Her Majesty Queen Elizabeth II on the 29th February, 1972.

Six Exhibition Galleries are being prepared. The six galleries are:—

1. **The fishing and animal traps Gallery** — We hope to show the traditional occupation of the people in Brunei.
2. **Exhibition gallery of the Oil Industry** — Prepared by the Brunei Shell Petroleum Company.
3. **Natural History Gallery** — Where the insects, reptiles and mammals of Brunei are exhibited.
4. **Cultural Gallery** — Exhibiting the Cultural artifacts of the people of Brunei in particular and Borneo in General.
5. **Ceramics Gallery** — Where Chinese Ceramics, brass-ware and Jades are exhibited.
6. **The Native Houses Gallery** — Where the houses of the various natives of Brunei are exhibited.

It was in 1971 also that the Churchill Memorial Museum and the Brunei Historical Centre was officially opened on the 23rd November, 1971. Both these sections came under the Museum Department.

The Churchill Memorial Museum exhibit the life history of Sir Winston Churchill.

In the Brunei Historical Centre, we exhibit a part of the royal regalia from the Istana, medals and decorations.

Estimates of Expenditure for the year — 1971

1. Personal Emolument	...	...	...	...	\$230,840.00
2. Recurrent Expenditure	...	...	...	...	\$168,800.00
3. Special Expenditure	...	...	...	...	\$119,650.00
Total	...	...	...	...	\$519,290.00

Publications

In 1971, the Brunei Museum Journal, Vol. II No. 3 was published. At the same time, we were able to publish a Souvenir pamphlet to commemorate the Official Opening of the Churchill Memorial Museum on the 23rd November, 1971.

Another booklet published was the five years report of the Brunei Museum, 1965-1970.

This is a short history of the Brunei Museum, tracing the history, establishment and development of the Brunei Museum.

Seminars and Attachment Course

Mr. Lim Jock Seng, the Assistant Curator of the Brunei Museum was one of the Brunei delegates who attended the Twelfth Pacific Science Congress in Canberra, Australia — 18th August to 3rd September, 1971.

In August, two Museum Staff Awang Mohd. Yusof bin Ludin and Awang Chuchu bin Ja'afar left for Kuching to be attached with the Museum there. They spent three months in the Kuching Museum to gain practical experience there.

SOCIAL DEVELOPMENT

(g) Language and Literature

Activities for the implementation of the main policies of the Language and Literature Bureau under section 82(1) of the Brunei Constitution 1959 were carried out carefully and conscientiously throughout the year 1971. As the main task of Bureau was to improve the quality and status of the Malay language and to widen its use among the general public, activities were directed towards publication of books, development of the language in Government departments and Commercial and Industrial firms, and the expansion of library activities and services. Of no less importance were activities in the field of Research, Translation, Terminology, Etymology and Arts which represent important fields in the overall development of the Malay language.

As in the work of other arts the field of language development also requires experts or at least trained, interested and experienced staff. The absence of language experts or persons interested in writing textbooks was very much felt by Language and Literature Bureau and this somewhat affected the work of the Bureau especially in the field of publication of books and magazines. During 1971 posts of experts i.e. that of the Language Officer and Chief Translator has not been filled.

The positions of the activities of each section as at the end of 1971 were as follows:—

2. Staff

For 1970 the department was allocated a vote of \$440,835.00 for a staff of 81 persons including the addition of 3 new officers i.e. one Library Assistant and two Library Attendants. Salaries for 71 members of the staff amounted to \$376,703.95. This department was only able to recruit six new officers and one of them has left for further studies overseas, and two serving officers were promoted. Until the end of 1971 this department still had 10 vacant posts.

Collection of Revenue

From both Heads for Printing amounting to \$215,000.00 a sum of \$30,079.85 was spent in printing books and magazines. From the same Head, a sum of \$84,000.00 was transferred to several other Heads which were short of funds. Revenue from sale of books and magazines amounted to \$25,617.79.

SOCIAL DEVELOPMENT

Training

In 1971 the department sent two officers to the Singapore National Library for training in library work for six months. The officers were Dayang Hasnah binte Hashim and Dayang Norzainah binte Awang Damit. The special course was meant to increase their knowledge and experience for the smooth performance of their duties for the good of the department.

3. Publication Section

The following quarterly magazines are regular publications of the bureau:—

- (a) BAHANA — in the form of cultural literature;
- (b) BERIGA — in the form of general knowledge and academic; and
- (c) MEKAR — children's magazine.

During the year 1971 the magazine "BERIGA" could not be published due to difficulty in finding suitable materials. Another difficulty was insufficient staff to check the materials a major part of which are translations from other languages. It is regretted that contribution of original articles from local writers was not forthcoming at all. The magazine MEKAR was published only twice due to slow process of printing.

The book "MENJELAJAH SAINS 55" was being printed and expected to be read by the public early in 1972. Checking of the book "MENJELAJAH SAINS 6" was almost completed and the book is also expected to be ready for publication in 1972.

A book entitled "Chatatan Sejarah Perwira2 dan Pembesar2 Brunei" in Brunei History Books Series, Language and Literature Bureau compiled by Yang Berhormat Pehin Orang Kaya Amar Diraja Dato Seri Utama (Dr.) Haji Mohd. Jamil Al-Sufri, Director of Language and Literature Bureau has been published and well received by the public. This publications is a new project for the purpose of filling the vacuum of history books on the State of Brunei. The publication series will be continued from time to time.

The publication of book "Kumpulan Titah Duli Yang Teramat Mulia Begawan Sultan, Sir Omar Ali Saifuddin 1959-1967" which was expected to be ready during the year was delayed in the printing process. However, the book will be published in 1972.

Among other books in preparation/checking stage are "Kumpulan Cherpen Kanak-Kanak", "Buku Latehan Bahasa" (six series), "Buku Civic", "Kumpulan Cherita Kanak-Kanak" dan "Peribahasa Sekolah Rendah".

SOCIAL DEVELOPMENT

4. Translation Section

As in the previous year, the Translation Section still had four officers — one Senior Translator and three translators. One translator deals with Japanese/Malay and Chinese/Malay translations (shop signboards) and the rest deals with Malay/English/Malay translations. Although there were two vacancies i.e. the posts of Translator and Chief Translator the posts still could not be filled.

Apart from translating materials for the use of the Language and Literature Bureau, the section received materials from other Government departments for translation, among which were the State Secretariat, Telecommunication Department Kuala Belait, Public Works Department, Customs and Excise, Medical and Health, Establishments, Marine, Telecommunications Department Bandar Seri Begawan, Royal Police Department, Veterinary Clinic and Agriculture. The Section also assisted in translation work of the Education Commission.

5. Terminology Section

During 1971 the work of this section proceeded smoothly. The work is increasing. From January to August the work of the section was carried out by a Terminologist. On 3rd August, 1971 an Assistant Terminologist was appointed and since then the work of the section was performed by two officers.

A Terminology Committee for names of shop/company was formed in February. The duty of the committee was to find equivalents in Malay or to translate into Malay names of Shop/Company throughout the State. The Committee met 34 times and the total number of names of shop/company translated was 568. The section also assists in translating letters and memoranda and checking terminology used in translations required by Government departments.

6. Dictionary Section

The collection of Brunei Malay words for KAMUS BAHASA MELAYU BRUNEI proceeds smoothly. Since July 1971 words that have been collected were checked by Dictionary Committee for publication in series in the magazine BAHANA. Two series comprising of 423 words have been published. Meetings to discuss materials collected were held once a week.

Apart from that, draft texts for Children's Dictionary have been prepared and the next step would be to check the draft. Collection of names of fish, plants and animals have also been made. At the end of 1971, 150 names of fish, 40 birds and 150 plants have been collected.

7. Research Section

A primary History Book of Brunei is being prepared with the co-operation of Editorial Section. About 50% of the materials for the book have been completed. The book "Titah DYMM Paduka Seri Baginda Maulana Al-Sultan Sir Omar Ali Saifuddin 1959-1967" was printed in December. Newspaper articles and historic documents in micro-films obtained from Public Record Office, London have been catalogued. Manuscripts of poem Awang Semaun in Jawi have been copied into Rumi. During the year a Cultural Body was formed under the management of the section.

The following research materials were collected by the end of December, 1971:

(a) Recordings

1. Old stories and stores for children (20 tapes).
2. Poems (7 tapes).
3. Original Music and Songs of Brunei (30 tapes).
4. Customs of Brunei (31 tapes).
5. History — Conversation and lectures (15 tapes).
6. Miscellaneous — speeches of His Highness The Sultan and others (85 tapes).

(b) Microfilms

1. History (85 rolls).
2. Literature (13 rolls).
3. Customs (1 roll).

(c) Old Local Manuscripts

All these manuscripts are in the form of literature, history and customs of Brunei (65 copies).

(d) Pictures

Nearly 6,000 copies of pictures and slides have been collected and all of them depict activities on customs and cultural gatherings.

SOCIAL DEVELOPMENT

8. Library Section Services

The Language and Literature Bureau's Library (PDBP) continued to play an important part in helping to develop the moral, social and economic education of the State. The quick change experienced by the State had increased the responsibility of the Library.

Library Hours: The Library was opened to the public from 8.00 a.m. to 8.00 p.m. on Monday to Thursday and Saturday and from 9.00 a.m. to 8.00 p.m. on Sunday.

The Language and Literature Bureau's Library was opened to the public for 71 hours per week; the total hours in the evening is 24 hours; 11 hours on Sunday.

Attendance: During 1971 a total of 87,640 utilised the services of the Language and Literature Bureau's Library. As shown in Table 1, 61,651 adults and 26,079 children utilised the facilities provided by Language and Literature Library this year. Table 1 showed that the Language and Literature Library had become more popular among the public.

Table 1. Comparative DBPL Attendance

	1969	1970	1971
Adults	43,698	58,312	61,651
Children	27,160	20,518	26,079
Total	70,858	78,830	87,730

Home Reading Services: The year 1971 saw a significant expansion. On 1st September the Language and Literature Library started lending books for home reading. It is encouraging that during the four months of the service a total of 1,746 books have been circulated among 216 library members who are eligible to borrow the books.

South East Asian Library and Reference — With the completion of the Churchill Memorial Building where a space was provided for Language and Literature Library, the Reference Library has expanded. High Level reference books, South East Asia collection, work by and on Winston Churchill, and also periodicals of technical and professional nature are now kept in the new building. The Library Section of the Language and Literature Bureau is opened to students and researchers every day of the week, except on Friday, from 8.30 a.m. to 12.00 noon and 1.30 p.m. to 4.00 p.m.

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With the increase in the number of sources of reference, the number and variety of reference questions also increased. Personal inquiries, through post and telephone from Government departments, research students, and also from the public were attended to.

Bibliography Service: In order to publicise new books that have been obtained by the Library, 1,500 copies of bibliography containing title of new books, Malay and English, have been printed and circulated to schools and colleges, Government departments and youth associations throughout the State.

Training-In-Service: Three members of Government staff were given three months training on library work by the staff of the Language and Literature during the year.

Visit to the Library: 15 large groups comprising primary and secondary students of various schools visited the Library. During the visit a short talk on the use of library and its materials were given to the visitors.

Six groups from Police Training Centre visited the Library during the year.

Language and Literature Bureau Bookmobile

The service was extended to Kuala Belait and Seria since October this year. This addition made the total number of Bookmobile centres to four.

The total number of hours for the twice a month service in Sengkurong and Tutong was 126 hours; while in Seria and Kuala Belait the total was 24 hours. The number of hours service in Seria and Kuala Belait was less because both these places were newly opened in October.

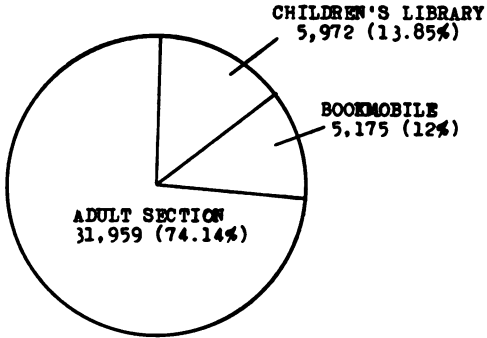
2,017 persons visited the Bookmobile this year and a total of 1,525 books were lent to members of Bookmobile.

The Library Collection

Books Collection: With the addition of 7,678 copies the DBPL total collection of books at the end of 1971 was 43,106 copies of which 31,959 or 74.12% of the total collection were for the adult section; 13.85% or 5,972 copies for children; and 12% or 5,175 copies for Bookmobile (see Table 2).

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Table 2: Library Book Collection Shown by General Grouping



Out of the total collection of books mentioned, 24,719 were in the Malay language. Table 3 showed a division of the collection according to language and other divisions where the books were placed.

Table 3: Comparative Distribution of Book Collection by Language and Section

Section	Malay	English	Other Languages	Total
Reference	1,906	4,465	—	6,371
Circulation	8,354	10,706	—	19,060
(other than fictions)				
Fictions	4,379	2,324	—	6,703
Children's Library	2,719	3,253	—	5,972
Work Room	767	3,971	262	5,000
Total	18,125	24,719	262	43,106

Most of the books kept in the work room seem to be those circulated to the public before they could be classified as the library was not yet arranged completely. The books were soiled and thus they were no longer suitable for circulation.

Although it was the intention of the library to own and maintain as many books as possible in Malay as in English it could not be achieved due to shortage of Malay publications.

Books in other languages which were available in the library collection were donations of soft cover type mostly in French and Chinese. They were not classified as there were no staff who could understand the languages.

Magazine Collection: The Language and Literature Library subscribed to 133 magazines. Table 4 showed 121 magazines and 12 newspapers. It was the same as Malay books, the library was unable to obtain more magazines in Malay due to shortage of publication in the language.

SOCIAL DEVELOPMENT

Table 4: DBPL Magazine Subscription

Language	Magazine	Newspapers	Total
English	111	7	118
Malay	9	5	14
German	1	—	1
Total	121	12	133

9. Development of Language

Several activities were launched in an effort to develop the Malay language more effectively. The activities were:—

(a) Competition

The results of short story writing for adults and children during 1970 were announced in early 1971 and the giving away of prizes and consolation prizes were held in March, 1971 in lecture room.

The full results of the Competition were:—

Adult Short Story Competition:

1. Dayang Rosmah binte Taha
2. Dayang Norsiah Abd. Gafar
3. Awang Ibrahim Haji Muhammad

Children Short Story Competition:

1. Dayang Norsiah Abd. Gafar
2. Awang Zaini bin Tuah
3. Awangku Aji Pengiran Md. Tahir

Children's Short Story which won prizes of honour and appreciation were being edited and it is hoped to publish the stories in book form.

(ii) Competition for writing stories on civics

The first competition held in the State was intended to increase the publication of books for Primary School meant for reading in Standard IV in Malay Schools.

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The basic purposes for holding the competition:—

- * To train children to know the positive identity of his race through living in communities.
- * To develop good citizenship character in children's life; and
- * To implant strong spirit, personal and discipline through work and daily practice.

The competition was first launched in the middle of 1971 and end in November, 1971. Up to the closing date of the competition 20 civic stories were received, and among them ten of the stories were considered suitable to be judged.

The result of the competition and the presentation of prizes may be performed in early 1972.

The body which organised the competition consisted of:—

1. Mahmud Haji Bakyr (Chairman)
2. Ahmad Kadi (Member)
3. Kamal Haji Salleh (Member)
4. Mohd. Ali Abd. Razak (Secretary)

(b) Translation of names of Shops/Business Companies

Since the beginning of this year about 600 names of shops/business companies have been translated into Malay; and the type of translations intended was:

1. From English to Malay; and
2. From Chinese (chop) to Malay

Out of the total was issued or given to those concerned:

1. For cars (136 names)
2. For signboards/letter heads (309 names)

From now names that have been translated (the balance and including those to be translated) will be given to the owners by stages.

SOCIAL DEVELOPMENT

So far, names of shops/companies which have been translated:

- | | |
|------------------------|-----------|
| 1. Bandar Seri Begawan | about 70% |
| 2. Muara | 95% |
| 3. Tutong | 95% |
| 4. Kuala Belait | 95% |
| 5. Temburong | 5% |
| 6. Seria | 10% |

The body that organised the translation consisted of:

1. Mahmud Haji Bakyr (Chairman)
2. Ahmad Kadi (Member)
3. Kamal Haji Salleh (Member)
4. Motoshige Mori (Member)
5. Haji Abdullah Bungsu (Member)
6. Muhammad Awang Jambol (Secretary)

(c) Meeting

During this year two meetings were held between the Director of Language Bureau and Towkeys/Managers of Business firms i.e. on 16th September, 1971, in Pekan Tutong; on 9th October, 1971 in Pekan Muara.

In those meetings the Directors emphasised on the importance of using Jawi characters on their signboards and asked for co-operation of the Towkeys/Managers of Business firms to use the Malay language which has been made official for 12 years, more often in conversation, speaking, name boards, advertisements for price of goods, letter heads, receipts and such like.

Apart from that meeting, invitation in groups (according to shopping blocks) and individual has also been issued. Such invitations were issued in order to bring the department closer to the people who will understand the aim of the department in its task of developing the use of the Malay language.

From the meetings and invitations issued the department was at least able to appreciate that the Towkeys/Managers of Business by verbal admission were willing to give their co-operation in upholding the wish of Government of the State. Even though it appears that in practice the reception could not be said to be satisfactory so far because there are groups who have not yet taken the Government appeal seriously.

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(d) Use of Malay language In Government Departments

This department often criticised the departments which did not make use of the Malay language in their memorandums/ circulars which incidently were sent to this department. Every time a criticism was made the department concerned was reminded of Secretariat Circular Nos. 8/1960; 59/1960, 9/1962, 43/1963, 52/1963 and 26/1965. It is a matter for regret that some of the departments that had been criticised several times were still ignoring the Secretariat Circular.

Secretariat Circular No. 26/1965 amongst other things emphasised:—

“In order that the usage of the official language may be further developed in the field of daily administration it is necessary that all FORMS used in every department should be made in the Malay language as far as possible.

In unavoidable cases, for example, because of something connected with law, there is no objection for the forms to be prepared in Malay and English.”

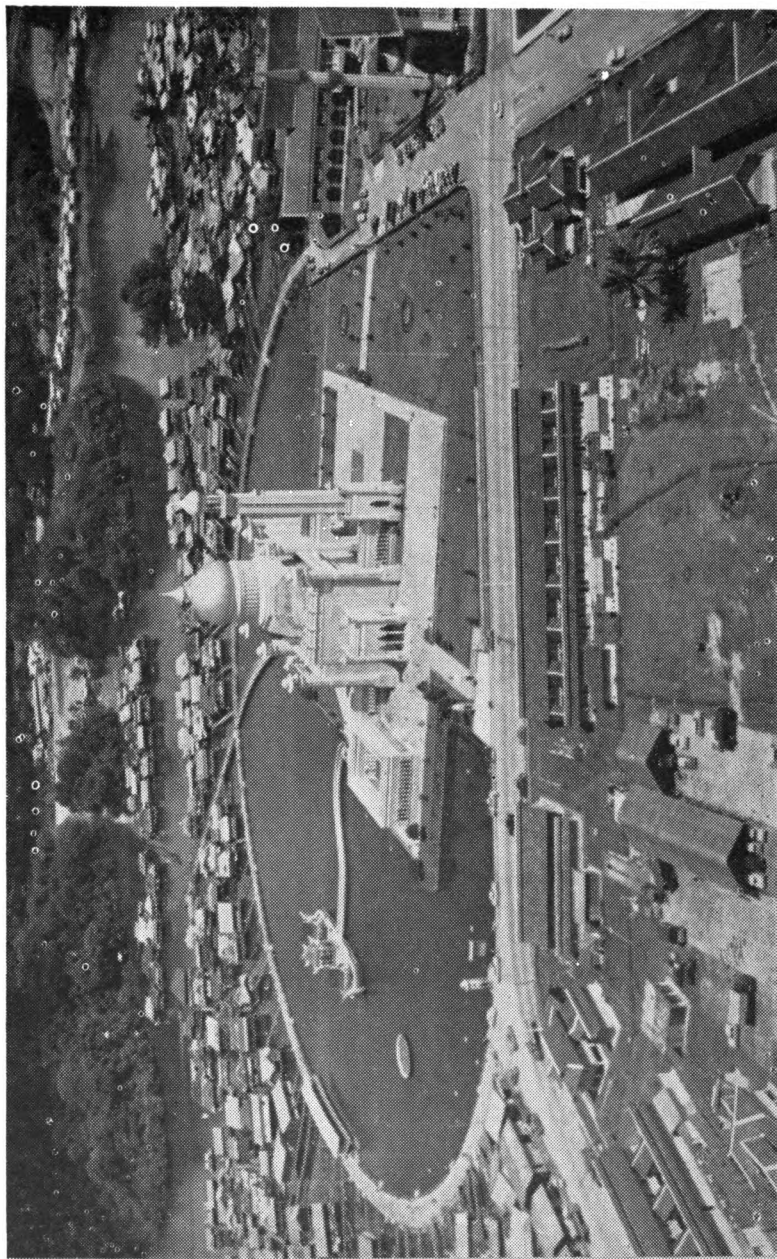
In fact, the purpose of the circular mentioned above could have been solved by Head of Department because prior to the circular, Secretariat No. 8/1960 para 4 requested:—

4. Heads of Department are also requested to send to the Secretariat copies of all forms, receipt books and other documents which are printed and used so that translation may be made.

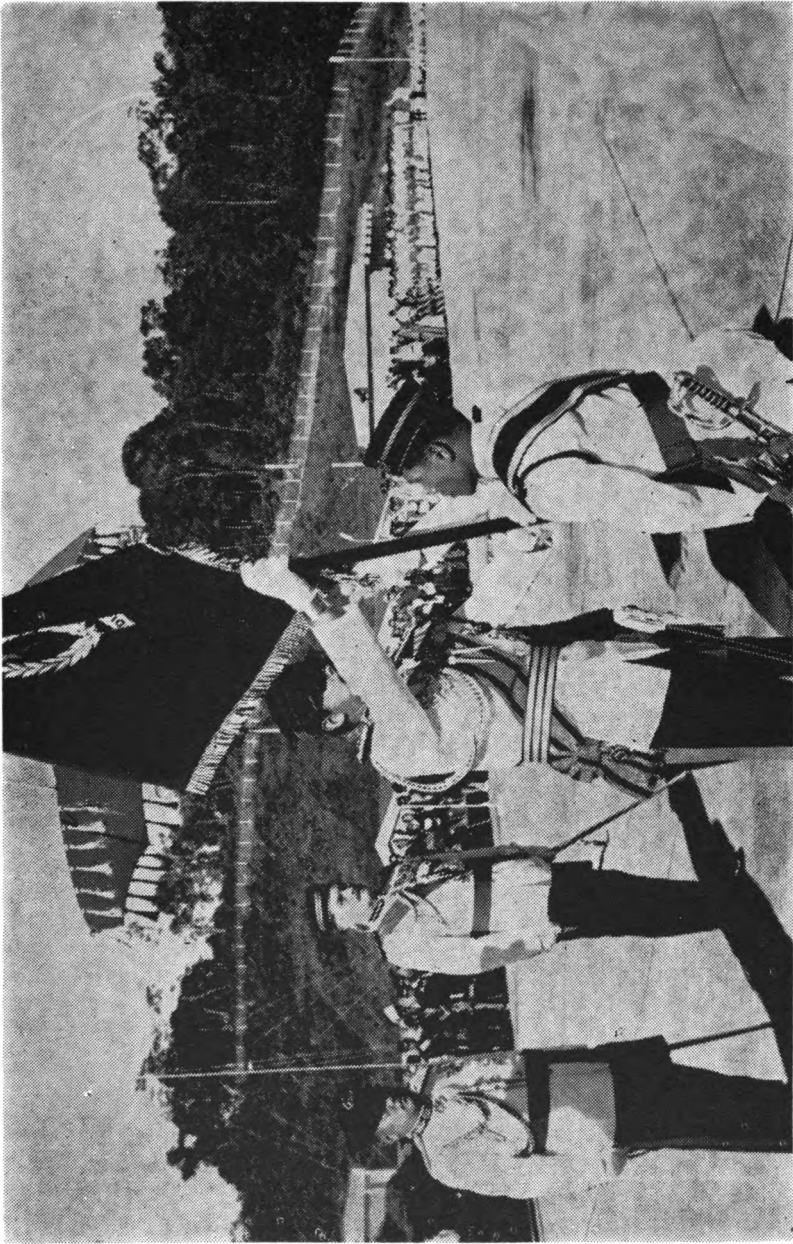
On this question a drastic and effective step should be taken in compliance with Section 82 (1) and (2) of the State Constitution and several Secretariat Circulars.

(e) Programme for development of language and literature on the Air

The programme was channelled through Radio Brunei twice a month and was progressing satisfactorily throughout 1971. It is arranged not only to bring the Language and Literature Bureau closer to the people but the more important thing is to give encouragement to the people to think for themselves on the question of language and culture. During 1971 the contents of the programme were changed more or less. It discussed not only the question of language but also on education, community, economy and other matters suitable to the climate of the developing Brunei communities.



The magnificent Omar Ali Saifuddin Mosque — the first in S.E. Asia.



His Highness presenting the Royal Brunei Malay Regiment with a new Sultan's Colours.

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(h) Religious Affairs

Introduction

Several important changes took place in the department between the end of 1970 and early 1971. It involved a change of officers in all important sections and the appointment of new officers commensurate with the work and programme for 1971. In view of the above and to ensure smooth administration several written rules have been made and later approved by His Highness. The gist of these rules concerned the publication of news and religious books which were carried out by the Information and Tabligh Section; education i.e. the establishment of Seri Begawan Religious Teachers' College, establishment of Religious Education Examination Board carried out by Religious Education Council; allocation of duties and working rules for officials of Omar Ali Saifuddin Mosque which was under the management of the Muslim Council.

This did not include the routine annual programmes carried out by each section.

Programmes

Administration

The Administrative Section which was established as the foundation of the Religious Affairs Department in 1954 is the centre of the department in all respects. Its duties are therefore the co-ordination and centralisation of all the work of the Head Office and District Offices. As the work and programmes have been divided the administrative section controls and carries out the routine duties.

The total number of officers and staff of the Religious Affairs Department in 1971 was 1,226 posts. Out of this total 832 posts were filled, and this did not include 30 posts of Imam, eight Khatib, 27 Bilal and 27 Merbut under the Muslim Council (making a total of 922 posts filled. The total number of daily-paid workers was 149 posts).

Pilgrimage matters are dealt with by this Section. In 1971 239 persons performed the pilgrimage: 161 by air and 78 by ship (comprising 123 male adults, 94 female, 11 male children and 11 females children (Annexe A).

Muslim Council

The Muslim Council does not come under the Religious Affairs Department but it is a body established under the powers of Enactment No. 20 of 1955 for the purpose of advising His

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Highness in all religious matters. With the existence of the Council the Head of Religious Affairs was appointed as a member of the Muslim Council itself. In many matters any decision of the Council is entrusted to the Religious Affairs Department for implementation. In 1971 the Muslim Council held six meetings.

On 1st June, 1971, 17 new Council members were appointed by His Highness. The membership is for two years (see Annexe B), while appointment of Judicial Committee and Legal Committee were approved for two years also.

Twelve Kampong Mosques throughout the State were granted financial assistance i.e. two new buildings costing \$25,207.00 and ten buildings were repaired at a cost of \$8,001.20 making a total amount of financial assistance of \$33,208.20. These grants were given on the advice and approval of Kampong Mosques Assistance Committee (Annexe C).

The General Administrative Revenue (1970) i.e. revenue from the Court, individuals and estates not fully distributed, amounted to \$136,183.09, an increase of \$31,861.66 over that for 1969 (Annexe D).

In addition to owning 10.61 acres of land as a result of undistributed legacy the Council is also entrusted with 8.127 acres of "wakaf" land.

Collection of "Zakat Fitrah" for 1970 amounted to \$92,590.53½ and a sum of \$61,785.09¾ was paid to parties entitled while the balance of \$30,805.43 5/6 is kept by the Council as there is no one entitled to receive it. 937 katis 8 tahlil of rice were received out of which 625 katis 8 tahlil were distributed and the excess of 312 katis was entrusted to the Council as its share. Zakat padi amounted to 3.070½ gantang of which 2.042 gantang were distributed and the balance of 1.028½ was handed to the Council (Annexe E).

Cases dealt with by Kadzi's Courts throughout the State were as in Annexes (F) and (G).

The total number of persons who embrace the Islam Religion was 60 i.e. 22 from Brunei/Muara District, 27 from Belait District, eight from Tutong District and three persons from Temburong. Most of them were from the indigenous races while several were Europeans.

During 1971 Pehin Datu Seri Maharaja issued 51 Fatwas on various problems affecting the lives of Muslims. The Religious Council is collecting and compiling these Fatwas for public reading.

SOCIAL DEVELOPMENT

There are 50 mosques throughout the State i.e. five Government mosques and other mosques under the care of the Council: 23 in Brunei/Muara District, 15 in Tutong District, six in Temburong and six in Belait (Annexe H).

Religious Education

In 1971 a number of changes and proposals were made for 1972. The main ones are the appointment of the Principal of Seri Begawan Religious Teachers' College and making necessary preparations for starting a course in early 1972. 30 student teachers who passed the Certificate of Education and Lower Certificate of Religious Education have been selected to take the course for Junior Teachers.

The Seri Begawan Religious Teachers' College Building was completed since 1971 and handed to Religious Department by the architects.

An Assistant Superintendent of Religious Education has been appointed.

A trial system has been designed in secondary education by forming special Form IV for religious streams at SMAHB/SMARIAD and will commence in early 1972. The candidates consist of Form III students who possess the minimum qualification required.

A Religious Education Examination Board was formed for the purpose. It is proposed to hold, for the first time, an examination for the Certificate of Secondary Religious Education. The value of this certificate is equivalent internally to the Malaysian Certificate of Education.

A "Consultative Council between the State Education Department and the Religious Affairs Department" has been formed which consists of two members from each department and a Chairman and Secretary from the State Secretary's Office. The purpose of the Council is to discuss and co-ordinate all matters connected with religious education in Malay and English schools. As a result of this proposal Muslim Religion will be taught as a subject in Malay Schools from Standard I commencing from 1972. It will be started in Bandar Seri Begawan Schools as a first step.

The number of overseas scholarships* from secondary level to graduate level has increased making a total of 83 persons in 1971 i.e. 54 male and 29 female. It is estimated that by 1973 there will be no more scholarship for students in the lower secondary level (total of 15 persons in 1971).

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Out of this total one has returned to the country with B.A. degree in Muslim Law; one continues with post graduate study for Ph.D. in Muslim Law; three persons completed B.A. degree in Muslim Law and continues with studies for M.A. degree. Three persons entered the Islamic Faculty in the National University and one joined the Faculty of Literature in the University of Malaya (Annexe J).

Six teachers (three male and three female) and three Mosque officials were sent to Kelantan to attend a course on Koran Reading for one year. They were selected from several applications.

In 1971 there were 82 Religious Schools which until now had no buildings of their own except for a few temporary school buildings. Religious schools are therefore still using Malay and English School buildings.

Pupils joining religious schools are those studying in Standard III in Malay School and above. The conditions are that Standard III students enter Standard I in Religious School.

Total number of students is 7,613 i.e. 4,413 girls and 3,200 boys in 82 schools which have 427 classes. Most of the schools are co-educational. The number of teachers is 354: 136 boys and 218 girls and out of this total 95 are student teachers.

In addition, the Department has also sent teachers to teach religious knowledge (as a subject) in Malay and English schools. The total number of schools that teach such religious knowledge is 16 and the total number of classes is 523 with 15,050 students. The number of teachers is 85 i.e. 39 male and 46 female (Annexe K and L).

Examinations in 1971 have produced better results than in previous years.

Examination for Lower Religious School Certificate (Standard IV) has produced 184 passes out of 241 candidates i.e. six obtained Grade I; 34 Grade II, 76 Grade III and 68 ordinary pass.

The result of the Malaysian Lower Education Certificate Examination for Hassanal Bolkiah Secondary Religious School and Raja Isteri Anak Damit Secondary Religious Schools in 1971 has been very satisfactory i.e. 46 out of 105 passed compared with 35 out of 120 candidates in 1970, i.e. 19 male and 27 female.

The result of the examination was better than 1970 (In 1970 six out of seven candidates passed, all obtaining Grade III. The result for 1971 was 23 passed Full Certificate, seven passed the General Education Certificate and four failed (Annexe M).

SOCIAL DEVELOPMENT

In 1971 there were 396 students in Arab Secondary Schools i.e. 92 in Secondary Preparatory Classes and 304 in the various Forms. The highest class was Form Five. Plan for providing Form VI is still under consideration (Annexe N).

was extended until 1971. With the existence of Seri Begawan Religious Teachers' College it is proposed to abolish such a course in 1972. Recruitment of student teachers will be reconsidered in 1972 with better and standard conditions. The Religious Teachers' Course was of course only temporary and it can be dissolved when a permanent arrangement is considered available.

The building of Religious Teachers' College was approved by His Highness in 1964, completed in 1970 and handed to Religious Affairs Department in early 1971.

A Principal, Yang Mulia Tuan Haji Othman bin Bidin ex-Principal, Teachers' College, Brunei was appointed in June 1971.

A Religious Education Planning Committee of the College was formed in 1968. The Committee suggested the establishment of the Religious Teachers' College and at the end of 1970 a Special Committee was formed to prepare for the establishment of the College and the rules for conducting the College were drafted. Among other things the rules require the formation of a Teachers' College Council which will deal with the policy and progress of teachers education in the College. The Draft Rules were submitted to His Highness who approved them. His Highness also approved that the College be named "Maktab Perguruan Agama Seri Begawan Sultan" (MPUSB).

At the end of the year 30 students were selected to enter the College early next year. They consisted of probationary religious teachers who were appointed in August, 1971 and who passed the Malaysian Lower Certificate of Education and Standard VI in Religious. They will be trained at MPUSB for three years before being considered as a College trained teacher. A salary scale has been arranged and approved by Government.

Adult Education is divided into two sections i.e. Religious lessons and Qura'an lessons. The syllabus for religious education is three years primary; three years lower; three years secondary and two years Higher Education. The syllabus for Qura'an education is three years lower; three years secondary and one year extension.

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The total number of adult classes in 1971 was 177 (religion) and 108 (Qura'an with 6,797 students; 2,369 boys and 4,428 girls. The strength of teachers was 219: 156 male and 63 female (Annexe Q).

Information on Islam Religion

The section for Islam Religious Information was a separate body under Religious Education Section. It was later made into a section of the Religious Affairs Department. The section has travelled to all places in the State that are accessible by various means including helicopter, if necessary, for the purpose of spreading the teachings of Islam all over the country.

Apart from propagation by lectures and dialogues the section also possesses a film unit, photographers, technicians and editors to deal with publications which will be distributed either on payment or free.

The total number of permanent staff is 39. In addition, there are a number of part-time and voluntary service consisting of officers and religious teachers who have the experience in this field. This section has 213 types of equipment for information work, excluding 116 type of photographic equipment.

During the year, 1,649 reels of films have been screened and attended by about 29,000 persons. 191 radio broadcasts have been made in special religious programmes. 4,460 copies of pictures have been taken out of which 1,790 are for news publication, one magazine and two books have also been published (Annexe R).

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ANNEXE A

Number of Brunel Pilgrims by Air during 1971/1972 Pilgrimage

Male Adults	85 persons
Female Adults	...	...	...	...	...	...	...	64 persons
Male Children	...	...	...	...	...	...	...	5 persons
Female Children	...	...	...	...	...	...	...	7 persons
Total	...	...	...	...	...	...	...	161 persons

Number of Brunel Pilgrims by Ship during 1971/1972 Pilgrimage

Male Adults	...	...	...	...	...	...	...	38 persons
Female Adults	...	...	...	...	...	...	...	30 persons
Male Children	6 persons
Female Children	4 persons
Total	78 persons
Grand Total	239 persons

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ANNEXE B

Members of Muslim Religious Council, Brunei

Appointment for 2 years w.e.f. 1st June, 1971

1. Yang Berhormat Pehin Orang Kaya Ratna Di-Raja Dato Seri Utama Awang Haji Mohd. Zain bin Haji Serudin, D.K., D.S.L.J., P.H.B.S. (President of Council).
2. Yang Teramat Mulia Seri Paduka Duli Pengiran Temenggong Sahibol Bahar, Pengiran Haji Mohammed bin Pengiran Abdul Rahman Piut, D.K., S.P.M.B., D.S.N.B., P.A.N.S., P.O.A.S., M.B.E., P.J.K. (Member).
3. Yang Amat Mulia Pengiran Setia Raja Pengiran Jaya bin Pengiran Haji Rajid, D.K., P.H.P.N.B., Q.P.M., C.P.M. (Member).
4. Yang Amat Mulia Pengiran Setia Jaya Pengiran Haji Momin bin Pengiran Othman, D.K., D.S.N.B., S.L.J., P.O.A.S. (Member).
5. Yang Berhormat Pehin Orang Kaya Laila Setia Bakti Di-Raja Dato Seri Utama Awang Isa bin Pehin Datu Perdana Menteri Dato Seri Utama Haji Ibrahim, D.K., D.S.N.B., P.H.B.S., O.B.E. (Member).
6. Yang Di-Muliakan Pehin Datu Seri Maharaja Dato Utama Awang Haji Ismail bin Omar Abdul Aziz, D.K., D.S.L.J., S.M.B., P.I.S., P.H.B.S. (Member).
7. Yang Berhormat Pehin Jawatan Luar Perkerma Raja Dato Seri Utama Awang Haji Mohd. Taha bin Pehin Ratna Di-Raja Awang Hussin, D.K., S.P.M.B., D.S.N.B., P.J.K. (Member).
8. Yang Berhormat Pehin Orang Kaya Laksamana Dato Seri Utama Awang Haji Abdul Rahman bin Pehin Orang Kaya Shahbandar Haji Mohd. Taha, D.K., S.P.M.B., D.S.L.J., P.S.B., P.O.A.S., P.H.B.S., P.J.K. (Member).
9. Yang Di-Muliakan Pehin Si-Raja Khatib Awang Haji Abdul Hamid bin Pehin Setia Pahlawan Haji Mohd. Ja'afar, S.L.J. (Member).
10. Yang Di-Muliakan Pehin Tuan Imam Dato Paduka Awang Haji Mohd. Yusof bin Pehin Perdana Wangsa Haji Mohamed, D.P.M.B. (Member).
11. Yang Berhormat Begawan Pehin Khatib Dato Seri Utama Haji Metali bin Matyassin, D.K., D.P.M.B., P.O.A.S., J.J.K. (Member).
12. Yang Berhormat Awang Haji Abdul Aziz bin Begawan Pehin Udana Khatib Dato Seri Paduka Haji Umar, S.L.J. (Member).
13. Yang Mulia Awang Abdul Hamid bin Bakal (Member).
14. Yang Mulia Awang Yahya bin Haji Ibrahim (Member).
15. Yang Mulia Tuan Haji Rahman bin Mohammad, P.O.A.S. (Member).
16. Yang Mulia Awang Saman bin Abdul Kahar (Member).
17. Yang Mulia Awang Haji Abdul Aziz bin Juned (Member).
18. Yang Mulia Awang Ibrahim bin Haji Mohd. Tinggal (Secretary).

SOCIAL DEVELOPMENT

Members of Legal Committee

Appointment for 2 years from 1st June, 1971

1. Yang Di-Muliakan Pehin Datu Seri Maharaja Dato Seri Utama Awang Haji Ismail bin Omar Abdul Aziz, D.K., D.S.L.J., S.M.B., P.I.S., P.H.B.S. (Chairman).
2. Yang Berhormat Begawan Pehin Khatib Dato Seri Utama Haji Metali bin Matyassin, D.K., D.P.M.B., P.O.A.S., P.J.K.
3. Yang Berhormat Pehin Orang Kaya Laksamana Dato Seri Utama Awang Haji Abdul Rahman bin Pehin Orang Kaya Shahbandar Haji Mohd. Taha, D.K., S.P.M.B., D.S.L.J., P.S.B., P.O.A.S., P.H.B.S., P.J.K.
4. Yang Berhormat Pehin Orang Kaya Amar Di-Raja Dato Seri Utama (Dr.) Awang Haji Mohd. Jamil Al-Sufri bin Begawan Pehin Udana Khatib Dato Seri Paduka Haji Umar, D.K., D.S.L.J., D.P.M.B., P.O.A.S., P.H.B.S.
5. Yang Mulia Awang Abdul Hamid bin Bakal.
6. Yang Mulia Awang Yahya bin Haji Ibrahim.
7. Yang Mulia Awang Haji Abdul Aziz bin Juned.
8. Yang Mulia Awang Saman bin Abdul Kahar.
9. Yang Mulia Tuan Haji Abdul Rahman bin Mohammad, P.O.A.S.
10. Yang Mulia Awang Mohd. Ali bin Mohd. Daud.
11. Yang Mulia Awang Zakaria bin Dato Mahawangsa Haji Sulaiman.

Members of Judicial Committee

Appointment for 2 years commencing 1st June, 1971

1. Yang Di-Mulikan Pehin Datu Seri Maharaja Dato Seri Utama Awang Haji Ismail bin Omar Abdul Aziz, D.K., D.S.L.J., S.M.B., P.I.S., P.H.B.S. (Chairman).
2. Yang Berhormat Pehin Orang Kaya Laila Setia Bakti Di-Raja Dato Seri Utama Awang Isa bin Pehin Datu Perdana Menteri Dato Seri Utama Haji Ibrahim, D.K., D.S.N.B., P.H.B.S., O.B.E. (Permanent Member).
3. Yang Mulia Awang Yahya bin Haji Ibrahim (Permanent Member).
4. Yang Mulia Tuan Haji Abdul Rahman bin Mohammad, P.O.A.S. (Extra Member).
5. Yang Mulia Awang Ali bin Mohd. Daud (Extra Member).

SOCIAL DEVELOPMENT

ANNEXE C

Financial Aid for Construction of Kampong Mosques In the State

1. Kampong Kiudang Mosque	\$12,010.00	
2. Kampong Bunut Mosque	13,197.00	
Total	\$25,207.00	\$25,207.00

Financial Aid for Repairing Kampong Mosques

1. Pengkalan Batu Mosque	\$ 200.00	
2. Pulau Berbunut Mosque	923.00	
3. Labi Mosque	1,000.00	
4. Kuala Balai Mosque	1,000.00	
5. Bukit Sawat	1,000.00	
6. Sungai Liang Mosque	1,000.00	
7. Keriam Mosque	999.20	
8. Telisai Mosque	800.00	
9. Lemunin Mosque	200.00	
10. Sinaut Mosque	879.00	
Total	\$ 8,001.20	\$ 8,001.20
Grand Total		\$33,208.20

SOCIAL DEVELOPMENT

ANNEXE D

1. Council Funds (General Administration Fund)

The undermentioned revenue is derived from: Fines, Marriages, Divorce, Re-marriage, Summonses, Witness, Interest from individuals Beneficiary's shares not fully distributed.

Balance carried forward from 1969	=	\$105,321.43
Revenue	1970	= 31,861.66
Total	=	\$136,183.09

2. Property:

(a) Bequeath Land:

E.D.R. 437 Lot 523 ...	2,882	acres	} Kg. Kota Batu, Brunei.
E.D.R. 442 Lot 524 ...	1,615	acres	
E.D.R. 596 Lot 659 ...	1.67	acres	
E.D.R. 727 Lot 658 ...	1.96	acres	

A wooden house at Jalan Dato Shahbandar, Kuala Belait.

(b) Beneficiarys' land not fully distributed (Baitol-Mal)

Lot 1061	...	1.03 acres	—	Kampung Remba
Lot 5848	...	0.29 acre	—	Kampung Remba
Lot 7990	...	0.32 acre	—	Kampung Sungai Hanching
Lot 1429	...	5.00 acres	—	Kampung Berakas
Lot 3419	...	2.05 acres	—	Kampung Tawaran, Labi
Lot 6229	...	0.26 acre	—	Kampung Dato Gandhi
Lot 1787	...	0.28 acre	—	Kampung Berakas
Lot 8590	...	0.60 acre	—	Kampung Salambigar
Lot 2545	...	0.66 acre	—	Kampung Mangsalot
Lot 2990	...	0.18 acre	—	Kampung Mentiri
Total:	...	10.61 acres		

SOCIAL DEVELOPMENT

ANNEXE E

Zakat Fitrah Collection

1. Cash:

Total collection 1970	...	\$92,590.53½	
Distributed to "Asnafs"			\$46,387.02½
Distributed to "Amil2"			15,398.07½
Council's share			30,805.43 5/6
Total		\$92,590.53½	\$92,590.53½

2. Rice Collection:

Total collection 1970	...	937Kt 8th	
Distributed to Asnafs			462Kt 8th
Distributed to Amil2			163Kt 0th
Council's Share			312Kt 0th
Total:		937Kt 8th	937Kt 8th

3. Zakat in Padi:

Total collection 1970	...	3,070½ gantang	
Distributed to Asnafs			1,531 gantang
Distributed to Amil2			511 gantang
Council's Share			1,028½ gantang
Total:		3,070½ gantang	3,070½ gantang

SOCIAL DEVELOPMENT

ANNEXE F

Annual Report of Marriage, Divorce, Remarriage 1971 Brunel and Muara District

Month	Marriage	Divorce	Remarriage
January	35	1	—
February	18	3	—
March	6	1	—
April	43	1	1
May	55	2	1
June	31	5	—
July	38	4	2
August	19	4	—
September	38	6	—
October	54	3	—
November	3	—	—
December	—	—	—
Total	340	30	4

Note:

1. The Registration in this Annual Report was from 1st January, 1971 until 30th November, 1971. Month of December was not included in this report.
2. The figures were based on the time of registration of the marriage not on the time of performance.

SOCIAL DEVELOPMENT

ANNEXE F (ii)

Annual Report of Marriage, Divorce, Remarriage 1971

Belait District

Month	Marriage	Divorce	Remarriage
January	5	2	—
February	12	2	—
March	8	1	—
April	8	—	—
May	7	3	—
June	9	—	—
July	4	—	—
August	11	3	—
September	7	1	—
October	15	—	—
November	1	1	—
December	*	*	*
Total	87	13	—

Note:

1. This report is made according to date of registration.
2. Those marked * were not registered as the report was made in November.

SOCIAL DEVELOPMENT

ANNEXE F (iii)

Annual Report of Marriage, Divorce, Remarriage 1971 Tutong District

Month	Marriage	Divorce	Remarriage
January	12	—	—
February	3	—	—
March	8	1	—
April	7	1	—
May	5	—	—
June	8	—	—
July	12	—	—
August	6	—	—
September	10	—	—
October	10	—	—
November	*	*	*
December	8	—	—
Total:	89	2	—

Note:

1. This report is made according to date of registration.
2. * Not registered as there was no marriage/divorce/remarriage in that month.

SOCIAL DEVELOPMENT

ANNEXE F (iv)

Annual Report of Marriage, Divorce, Remarriage 1971

Temburong District

Month	Marriage	Divorce	Remarriage
January	1	—	—
February	3	—	—
March	1	—	—
April	2	—	—
May	3	1	—
June	2	2	—
July	3	1	—
August	4	1	—
September	4	1	—
October	8	—	—
November	—	—	1
December	—	—	—
Total:	31	6	1

Note:

1. The figures were made at the time of registration of marriage.
2. Figures for December are not included.

ANNEXE F (v)
Persons Embracing Islam Religion 1971
Race and Gender

District	Iban		Dusun		China		Eurasian/ European		Other Natives		Others		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Brunei/Muara	7	1	2	1	2	5	1	2	—	—	1	—	22
Belait	6	5	4	4	1	5	—	—	2	—	—	1	27
Tutong	1	2	2	2	1	—	—	—	—	—	—	—	8
Temburong	2	—	—	1	—	1	—	—	—	—	—	—	4
Total	16	8	8	8	4	11	1	2	2	—	1	1	61

SOCIAL DEVELOPMENT

ANNEXE F (vi)

Report of Marriage, Divorce, Remarriage and Embracing Islam In the whole State for 1971

District	Marriage	Divorce	Remarriage	Embracing Islam
Brunei/Muara	305	33	4	22
Tutong	89	2	—	8
Temburong	31	6	1	4
Belait	87	13	—	27
Total	512	54	5	61

Note: The report was made up to the month of November, 1971 only.

ANNEXE (G) (i)

Report of Kadzi's Court for the whole State, 1971

CHIEF KADZI'S COURT

District	of cases No.	No. charged	No. acquitted	No. fined	No. sentenced on bond	prison	case	Appeal persons	fine	Prison	Case Withdrawn	On Trial
Total	63	127	1	117	—	9	—	—	—	—	—	—
Brunei/Muara	39	87	1	77	—	4	—	—	—	—	—	—
Belaït	19	35	—	32	—	3	—	—	—	—	—	—
Tutong	5	10	—	8	—	2	—	—	—	—	—	—
Temburong	—	—	—	—	—	—	—	—	—	—	—	—

KADZI'S COURT

Total	39	37	—	26	1	2	—	—	—	—	—	—
Brunei/Muara	10	12	—	5	—	2	—	—	—	—	—	—
Belaït	27	23	—	19	1	—	—	—	—	—	—	—
Tutong	—	—	—	—	—	—	—	—	—	—	—	—
Temburong	2	2	—	2	—	—	—	—	—	—	—	—

ANNEXE (G) (ii)

Report on Kadzi's Court for the whole State, 1971

Offence	of Cases	No. charged	No. acquitted	fine	Number sentenced bond	prison	Appeal case	prison	Case Withdrawn	On Trial
Total	102	164	1	143	1	11	—	—	—	—
Illegitimate sexual intercourse	63	127	1	117	—	9	—	—	—	—
Close Promimity	6	7	—	5	1	1	—	—	—	—
Drinking intoxicating liquers	20	20	—	19	—	1	—	—	—	—
Divorce asked by wife by "taqlek"	3	3	—	—	—	1	—	—	—	—
Maintenance for children	3	3	—	—	—	—	—	—	—	—
Wife's refusal	—	—	—	—	—	—	—	—	—	—
Eating during day-time in fasting month	7	4	—	2	—	—	—	—	—	—
Cases of Appeal	—	—	—	—	—	—	—	—	—	—

Note: This report was made out from January, 1971 until November, 1971.

SOCIAL DEVELOPMENT

ANNEXE H (i)

ANNEXE H

List of Mosques

for the whole State of Brunei

Mosques in Brunei/Muara District:

1. Omar Ali Saifuddin Mosque
2. Setia Ali Mosque, Pekan Muara
3. Sufri Bolkiah Mosque Kampong Perpindahan, Berakas
4. Jame' Mosque, Sengkurong
5. Kilanas Mosque
6. Sungai Hanching Mosque
7. Tanah Jambu Mosque
8. Kampong Bunut Mosque
9. Jerudong Mosque
10. Batu Marang Mosque
11. Pengkalan Batu Mosque
12. Panchor Murai Mosque
13. Masin Mosque
14. Lumapas Mosque
15. Kasat Mosque
16. Sungai Besar Mosque
17. Limau Manis Mosque
18. Dato Gandhi Mosque*
19. Junjongan Mosque*
20. Menunggol Mosque*
21. Pulau Baru2 Mosque
22. Pulau Berbunut Mosque
23. Pudak Mosque

Note: * Still under planning

SOCIAL DEVELOPMENT

ANNEXE H (ii)

Mosques in Tutong District:

1. Hassanal Bolkiah Mosque, Tutong
2. Penanjong Mosque
3. Telisai Mosque
4. Danau Mosque
5. Tanjong Maya Mosque
6. Penapar Mosque
7. Birau Mosque
8. Keriam Mosque
9. Sinaut Mosque
10. Kupang Mosque
11. Lamunin Mosque
12. Kiudang Mosque
13. Layong Mosque
14. Kati Mahar Mosque*
15. Bukit Beruang Mosque*

Mosque in Belait District:

1. Mohammad Jamalul Alam Mosque
2. Pekan Seria Mosque
3. Sungai Liang Mosque
4. Labi Mosque
5. Kuala Belait Mosque
6. Bukit Sawat (Sungai Ubar) Mosque

Mosques in Temburong District:

1. Utama Mohd. Salleh Mosque
2. Labu Estate Mosque
3. Batu Apoi Mosque
4. Bukok Mosque
5. Belingus/Selangang Mosque*
6. Batang Tawau Mosque*

Note: * Still under planning

SOCIAL DEVELOPMENT

ANNEXE J

Report on Religious Education Scholarship Grant, 1971

Country and School	Up to Secondary Level		Upper Secondary Level		Higher Secondary Level		Graduate and Post-Graduate		Total
	M	F	M	F	M	F	M	F	
Singapore	1	—	8	—	—	—	—	—	9
Malaysia:									
Islam College, Kelang	—	—	3	5	20	2	—	—	30
Madrasah Naim, Kelantan	—	9	—	—	—	—	—	—	9
Izuddin Shah, Ipoh	—	—	4	—	—	—	—	—	4
Ehya Shariff Gunong Semanggol	—	1	—	1	—	—	—	—	2
Ta'ayah, Ipoh	—	2	—	2	—	—	—	—	4
Zainal Abidin, Trengganu	—	—	—	4	6	—	—	—	10
Sultan Ismail, Trengganu	2	—	3	—	—	—	—	—	5
Madrasah Khairiah, Trengganu	—	—	—	1	—	—	—	—	1
University of Malaya (Faculty of Literature)	—	—	—	—	—	—	1	—	1
National University (Faculty of Islam)	—	—	—	—	—	—	3	—	3
Arab Republic, Cairo									
Azhar University (Faculty of Muslim Law)	—	—	—	—	—	—	5	—	5
Total	3	12	22	15	20	2	9	—	83

SOCIAL DEVELOPMENT

ANNEXE K Report on Religious Teachers and Students, 1971 Religious Schools

District	Teachers		Pupils		Classes	No. of Schools
	M	F	M	F		
Brunei/Muara	43	111	1674	2342	195	33
Tutong	45	58	655	917	110	24
Temburong	24	19	344	388	63	16
Belait	14	27	527	766	59	9
Total	126	215	3200	4413	—	—
	341		7613		427	82

Average: 1 teacher: 1.2 classes

1 class: 18 pupils

1 teacher: 23 pupils

As a subject in School

District	Teachers		Pupils		Classes	No. of Schools
	M	F	M	F		
Brunei/Muara	24	32	5084	4606	329	18
Tutong	6	4	1016	986	70	3
Temburong	1	1	177	126	9	2
Belait	8	9	1580	1475	115	3
Total	39	46	7857	7193	—	—
	85		15050		523	26

SOCIAL DEVELOPMENT

ANNEXE L

Religious Schools in the whole State, 1971

Religious Schools in Brunei/Muara District at end of 1971

No.	School	Pupil		Teacher		Standard
		M	F	M	F	
1.	Madrasah Pagi	122	315	2	12	1 — 6
2.	Madrasah Petang	225	383	1	14	1 — 6
3.	SMJA Bukit	47	108	2	6	5 — 6
4.	Gadong	54	67	1	5	1 — 5
5.	Sungai Hanching	59	63	2	3	1 — 6
6.	Tanah Jambu	28	46	3	4	1 — 5
7.	Bunut	59	51	1	4	1 — 5
8.	Kiulap	48	58	2	4	1 — 4
9.	Kilanas	55	71	1	8	1 — 6
10.	Madrasah Setia Ali	51	59	1	4	1 — 5
11.	Amar Pahlawan	51	51	2	2	1 — 3
12.	Serasa Muara	23	29	—	2	1 — 3
13.	Kiarong	14	7	1	3	1 — 4
14.	Anggerek Desa	80	108	2	3	1 — 6
15.	Kampong Setia	65	62	1	3	1 — 3
16.	Lambak	31	29	1	4	1 — 5
17.	Delima Satu	56	64	4	3	1 — 6
18.	Lumapas	50	59	3	—	1 — 4
19.	Limau Manis	31	28	2	1	1 — 4
20.	Panchor Murai	21	17	1	—	1 — 3
21.	Masin	21	27	1	1	1 — 5
22.	Pangkalan Batu	15	14	1	1	1 — 4
23.	Kasat	27	17	2	—	1 — 4
24.	Bengkurong	28	11	1	2	1 — 2
25.	Mentiri	22	14	3	—	1 — 5
26.	Anak2 Askar Melayu	10	15	—	3	1 — 5
27.	Lurong Dalam	138	288	1	11	1 — 6
28.	Beribi	22	15	2	—	1, 2, 3 & 5
29.	Pintu Malim	60	45	2	3	1 — 4
30.	Junjongan	17	16	2	—	1 — 3
31.	Subok	39	47	3	—	1 — 4
32.	Burong Pingai Ayer	46	47	3	—	1 — 3
33.	Kampong Setia	59	111	1	3	1 — 3
Total		1674	2342	55	109	

SOCIAL DEVELOPMENT

Religious Schools in Tutong District at end of 1971

No.	School	Pupil		Teacher		Standard
		M	F	M	F	
1.	Muda Hashim	27	75	2	6	1 — 6
2.	Sengkurong	95	130	2	8	1 — 6
3.	Abd. Rashid, T. Maya	32	37	2	3	1 — 6
4.	Penanjong	31	55	2	4	1 — 5
5.	Keriam	41	58	2	6	1 — 6
6.	Senaut	43	58	2	4	1 — 6
7.	Birau	19	18	2	3	1 — 5
8.	Kiudang	24	34	3	1	1 — 5
9.	Lamunin	40	61	2	3	1 — 5
10.	Telisai	20	41	1	3	1 — 5
11.	Kati Mahar	25	24	1	3	1 — 3
12.	Pg. Muda Mahkota	11	25	1	3	1 — 5
13.	Kupang	13	25	3	—	1 — 4
14.	Layong	14	6	2	—	1 — 4
15.	Danau	22	42	1	4	1 — 6
16.	Jerudong	18	36	2	1	1 — 4
17.	Bekiau	15	13	3	1	1 — 4
18.	Kesuma Negara	12	13	1	1	1 — 4
19.	Penapar	24	18	1	2	1 — 4
20.	Sengkarai	47	62	1	3	1 — 4
21.	Kampung Menengah	19	24	1	1	1 — 3
22.	Bukit Penggal	19	17	1	1	1 — 3
23.	Mulaut	27	26	2	1	1 — 4
24.	Lubok Pulau	17	19	1	1	1 — 3
Total		655	917	41	62	
Grand Total		3200	4413	133	218	

SOCIAL DEVELOPMENT

Religious Schools in Temburong District at end of 1971

No.	School	Pupil		Teacher		Standard
		M	F	M	F	
1.	Sungai Besar	27	33	4	—	1 — 6
2.	Dato' Gandi	70	69	—	5	1 — 4
3.	Pudak	9	9	2	—	1 — 3
4.	Pulau Berbunut	9	6	1	1	1 — 3
5.	Pulau Baru2	8	16	2	—	1 — 3
6.	Batu Marang	37	58	2	2	1 — 4
7.	Menunggol	7	17	2	—	1 — 3
8.	Labu Estate	11	7	1	—	1 — 3
9.	Piasau2 Labu	12	12	1	1	1 — 4
10.	Senokoh	8	11	1	—	1 — 4
11.	Sultan Hassan	52	58	1	5	1 — 6
12.	Puni	31	37	2	1	1 — 5
13.	Bokok	25	16	1	2	1 — 4
14.	Batu Apoi	13	14	1	1	1 — 3
15.	Belais	12	15	1	2	1 — 5
16.	Belingus	13	10	1	—	1 — 2
	Total	344	388	23	20	

Religious Schools in Belait District at end of 1971

No.	School	Pupil		Teacher		Standard
		M	F	M	F	
1.	Pekan Belait	186	292	2	12	1 — 6
2.	Mohammad Alam	234	359	4	9	1 — 6
3.	Sungai Teraban	36	37	2	2	1 — 5
4.	Sungai Liang	15	26	1	1	1 — 4
5.	Rempayoh	6	5	1	1	1, 2, 3 & 5
6.	Kuala Balai	2	6	1	—	1 — 2
7.	Labi	20	12	1	1	1 — 4
8.	Lumut	21	22	1	1	1 — 3
9.	Bukit Sawat	7	6	1	1	1 — 3
	Total	523	766	14	27	

SOCIAL DEVELOPMENT

ANNEXE M (i)

Religious Schools Examination, 1971

Lower Religious School Certificate Examination

District	No. of Candidates			No. Passed		Grades Passed			Ordinary	Total Passes
	M	F	Total	M	F	I	II	III		
Brunei/Muara	42	97	139	30	71	4	25	33	39	101
Tutong	3	35	38	2	26	—	5	14	9	38
Belait	12	40	52	11	33	2	3	24	15	44
Temburong	5	9	14	4	7	—	2	5	4	11
Total	62	181	243	47	137	6	35	76	67	184

Malaysian Lower Certificate of Education Examination, 1971 (Hassanal Bolkiah Arabic Secondary School and Raja Isteri Anak Damit Secondary Religious School)

No. of		Grade of Passes				Percentage
Candidates		A	B	C	S	(A B C)
M	37	9	3	7	12	15 %
F	74	18	3	6	47	36.5%
Total	105	27	6	13	59	43.7%

Malaysian Certificate of Education Examination, 1971 (Hassanal Bolkiah Arabic Secondary School and Raja Isteri Anak Damit Religious Secondary School)

Candidates	Grade of Passes					Percentage
	I	II	III	S.A.R.	Failed	
F	2	3	7	3	1	93.75%
M	—	1	10	4	3	83.33%
Total	2	4	17	7	4	88.2 %

SOCIAL DEVELOPMENT

ANNEXE N

Pupils in Hassanal Secondary Arab School and
Raja Isteri Anak Damit Secondary Religious School, 1971

Tingkatan	Number		Total No. of Pupils	No. of Classes
	M	F		
I	32	58	90	3
II	10	29	39	2
III	74	31	105	4
IV	18	18	36	2
V	19	15	34	2
Kelas Persediaan	24	68	92	3
Total	177	219	396	16

Teacher's Strength in MABH/SUARIAD School, 1971

Number and Qualification

	M	F	Total	Trained		Untrained		Trained		Untrained		Trained		Untrained	
				M	F	M	F	M	F	M	F	M	F	M	F
Appointment	14	7	21	2	—	3	1	—	2	1	1	—	4	1	—
Permanent	14	7	21	2	—	3	1	—	2	1	1	—	4	1	—
Part-Time	55	1	56*	—	—	—	—	—	—	—	—	55	1	—	—
Total	69	8	77	2	—	3	1	—	2	1	1	63	5	—	—

* This number is because one teacher teaches only one subject in each grade.

SOCIAL DEVELOPMENT

ANNEXE P

Examination Courses For Religious Teachers

Year	Passed	Male	Female	Failed	Total No. of Pupils
1966/1967	42	34	8	7	49
1967/1968	44	14	30	4	48
1968/1969	46	14	32	5	51
1969/1970	30	9	21	8	38
1970/1971	42	9	33	9	51
Total	204	80	124	33*	237

* These students were allowed to repeat the examination the following year by attending classes in the subject they failed.

SOCIAL DEVELOPMENT

ANNEXE Q

Religious Adult Class in the State, 1971

District	No. of Classes				No. of Pupils			No. of Teachers		
	M	F	Mixed	T	M	F	T	M	F	T
Brunei/ Muara	31	56	8	95	743	1,731	2,474	42	25	67
Tutong	7	16	7	30	215	357	572	23	4	27
Belait	9	18	—	27	180	337	517	14	5	19
T'burong	6	13	6	25	249	392	64	15	1	16
Total	53	103	21	177	1,387	2,817	4,204	94	35	129

Average: 1 class: 24 pupils

1 teacher: 1.4 class

1 teacher: 32 pupils

SOCIAL DEVELOPMENT

Adult Qura'an Class in the State, 1971

District	No. of Classes				No. of Pupils			No. of Teachers		
	M	F	Mixed	T	M	F	T	M	F	T
Brunei/ Muara	23	27	13	63	632	1,108	1,740	31	18	49
Tutong	6	8	8	22	166	219	385	17	3	20
Belait	5	8	—	13	84	144	228	6	6	12
T'burong	2	5	3	10	100	140	240	8	1	9
Total	36	43	24	103	982	1,611	2,593	62	28	90

Average: 1 class: 24 pupils

1 teacher: 1.2 class

1 teacher: 28 pupils

SOCIAL DEVELOPMENT

ANNEXE R

Lectures and Cinema Shows

Muslim Religion Information Section, 1971

District	Total No. of Shows	T.No. of Lecture	Total No. of Visits	Total No. of Films	Audience
Brunei/Muara and Temburong	78	78	78	1,045 reels	16,848
Tutong	60	60	60	421 reels	12,960
Belaït	41	41	41	183 reels	8,856
Total	179	179	179	1,649 reels	38,664

Religious Programmes on the Radio, 1971

Qur'an Interpretation	Religious Lectures	Religious Questions	Muslim Kindergarten	Knowing Islam	Total
49	47	24	24	47	191

Films Produced by Information Section, 1971

Size of Film	For Newspapers/ Magazines/ Printing	For School/ College	For Exhibition Abroad/Local	For Mosque/ Office	Special
20" x 24"	—	18	47	20	65
12" x 24"	—	—	—	—	10
8" x 10"	965	—	—	10	1,025
8½" x 8½"	825	10	—	—	565
Post Card	—	250	—	—	650

Grand Total: 4,460 pieces

Annual Publication, 1971

Magazine	Newspaper Publication	Pamphlets	Books
1	23	1*	2*

* Muharram Celebration 1391.

- * 1. Puisi Hidayat
- 2. Lambaian Islam

CHAPTER 9

LAW AND ORDER

(a) Police

Part I

General Report and Survey for the year 1971

The year 1971 was a quiet one with no particular incidence of crime requiring special comment.

Part II

Establishment and Strength

Comparative figures for the last three years of the approved establishment and actual strength of the Force are set out at Appendix I. The distribution of the approved establishment is set out at Appendix II.

Gazetted Officers

Two Inspectors were promoted during the year to Gazetted Officer rank.

Two Gazetted Officers were enlisted during the year. There was one resignation.

Training

During the year a total of 6 Inspectors/Prob. Inspectors attended Junior Officers' Courses. Thirty Sergeants/Corporals and 117 Constables attended 8-week Refresher Courses in all aspects of Police duties.

A total of 120 Recruits undertook a 27-week Basic Course during the period under review.

Forty Recruits completed their six monthly basic training in Kuala Lumpur (Malaysia) and were subsequently posted to stations throughout the State.

Twelve members of the Training Centre staff gained Bronze Medallion and Intermediate Certificates of the Royal Life Saving Society. A total of 53 Bars to the Bronze Medal, 93 Bronze Medals and 110 Intermediate Certificates of the Society were gained by personnel attending Courses.

LAW AND ORDER

All members of the Force attending Courses at the P.T.C. under went instruction in First Aid; 161 members passed in examinations conducted by the Medical Department, and 89 men were under instruction at the end of the year.

Staff and Trainees underwent Judo Classes at the Training Centre. Two 4th Kup Yellow Belts and four Senior 5th Yellow Belts were gained by members of the staff. A total of 46 Recruits and 25 Reserve Unit "B" personnel gained Senior 5th Kup Yellow Belts.

Training Overseas

Four members of the Training Centre staff were went to the Royal Hongkong Police Training Centre to attend a three week training Methods Course.

Nine Inspectors attended course in Hongkong. These included Court Prosecution; CID Training, and Traffic Courses.

Two Senior Officers attended a Police Course in Dishforth, England, and one in Manly, Australia. Four Inspectors went to Hendon, and one Inspector is currently taking the Degree Radio Course in Glasgow University, Scotland.

Inspectors

Three members of the Rank and File were promoted to the Inspectorate. There was no recruitment of Inspectors during the year.

Casualties

A comparative table is given overleaf showing the number of men who have left the Force for various reasons during the last three years:—

	1969	1970	1970
Death	—	—	1
Desertion	—	—	—
Dismissal	23	19	13
Discharged/Medical Grounds	—	—	—
Discharged/Unable to become efficient	—	4	5
Resigned while under training	1	—	2
Other Resignations	11	1	—
Transferred to other Departments	—	—	1
Resigned on completion of Agreement	8	8	4
Retire on Pension	1	8	4
Total	44	40	30

LAW AND ORDER

Length of service

The length of service of all ranks is as follows:—

	1969	1970	1971
Under 5 years' service	335	397	483
5 to 9 years' service	194	196	212
10 to 14 years' service	171	182	184
15 to 19 years' service	36	51	90
20 to 24 years' service	50	40	41
25 years' service and over	6	12	19
Total	792	878	1,029

Clerical Staff

Clerical Staff	Establishment	Strength as at 31-12-1971
Confidential Secretary	7	6
Financial Assistant	1	1
Clerk Grade "B" Superscale 1	1	1
Clerk Grade "B"	20	18
Clerk Grade "A"	4	4
Stenographer	3	1
Total	36	31

Other Civilian Appointments

Appointments	Establishment	Strength as at 31-12-1971
Director of Music	1	1
Clerk Translators	5	4
Archivist	1	—
Assistant Archivist	1	1
Assistant Registrar	2	1
Religious Teachers	2	—
Peons	8	7
Cooks	21	12
Gardeners/Cleaners	37	27
	<hr/> 78	<hr/> 53

LAW AND ORDER

Expenditure

The following table shows the cost of the Police Force during year 1971:—

	Estimated Expenditure	Actual Expenditure
Personal Emoluments	\$6,731,272.00	\$5,961,778.00
Other Charges (Annual Recurrent)	1,126,900.00	933,888.30
Special Expenditure	1,097,358.00	705,271.70
Total	\$8,955,530.00	\$7,600,938.00

Under Special Expenditure there is a sum which is not included, this being for Crown Agents Indents and Local Indents, not yet billed.

Police Reward Fund

20.	Balance as at 31-12-1971	\$50,269.34
	Spent in 1971	\$ 9,514.02

Part III

Buildings

The Police Station/Married Quarters at Sungai Liang were completed before the end of the year, as also were the two Inspectors' Quarters and the Bachelor Block at Seria. Five Police Posts in rural areas were also completed and occupied.

Final phases commenced both at Seria and Kuala Belait Police Stations. These included extensive alterations and renovations to the Police Station at Seria and the building of a lecture hall, garages and stores at both Seria and Kuala Belait.

The building of the Tutong Police Station, Married Quarters and Bachelor Block started early 1971 and are about completed. We expect to occupy the new buildings early 1972.

Site preparations were completed and building started on the new Police Station site at Muara.

Site preparations for two multi million dollar projects commenced in late 1971. The new Reserve Unit Headquarters in Gadong and the new site for the Reserve Unit in Belait District: buildings for these two units are expected to commence in the first quarter of 1972.

LAW AND ORDER

Work commenced on the Officer's Block and additional classrooms at the Police Training Centre.

Further development at the Police Training Centre is another multi million dollar project, which will eventually house all its staff and provide more accommodation for students. This will in turn lead to increased capacity for training. A 100-yard Rifle Range is also included in this project.

The Ammunition Store was completed and work commenced on the 30-yard Pistol Range and six Officers' houses, all at Gadong Police Headquarters.

Plans for the First Phase of Brunei Police District Headquarters on a new site in Bandar Seri Begawan were completed and tenders called for. Building for this phase, a block of 40 married flats, is expected to start early in the new year.

Ceremonials

During the year the following Ceremonial Parades were held:—

- (a) 12th June, 1971 to celebrate the Birthday of Her Majesty the Queen.
- (b) 15th July, 1971 the celebration of the Birthday of His Highness the Sultan of Brunei.
- (c) H.H. The Sultan presented a Royal Standard to the Force on 14-8-1971.
- (d) Additional Parades were held for the opening of the High Court.

Legislation

Nothing upon which to comment.

Part IV

Crime

Total number of reports received in the State was 3,677 as compared with 3,699 in 1970 and 3,508 in 1969.

The following figures represent crime committed against property and persons:—

	1969	1970	1971
Robbery	2	3	—
House-breaking	46	85	80
Theft	245	243	328
Extortion	—	—	2
False Pretences	15	14	11
Grievous Wounds	3	13	—
Simple Assaults	46	107	378
Murder	1	2	—
Rape	1	—	1

LAW AND ORDER

The number of cases in which convictions were obtained increased from 22% in 1970 to 26% in 1971.

Arrests for gambling show a further decrease. Only six persons were arrested against 11 in 1970. Under the Dangerous Drugs Enactment eight persons were arrested and convicted against ten in 1970.

The significant increase in theft reports is due to two main factors — the continued increase in the number of youthful offenders who resort to crime through lack of parental control and gainful employment, and the complacent attitude of the public in general towards protection of property.

Crime Records Office

This office has 2,809 sets of prints in the main collection excluding prints of the Royal Brunei Malay Regiment and the Royal Brunei Police Force. The number of first offenders registered was 177.

A total of 447 enquiries and searches were made, 63 of which resulted in identification. In addition searches were made in respect of candidates for employment in Government Departments, applicants for British passports and citizenship, and for entry permits.

Visits to scenes of crimes were made in eight serious cases.

Traffic

Accidents Statistics	1968	1969	1970	1971
Total number of accidents	671	865	1,150	984
Number of fatal accidents	19	13	22	17

Classification of Accidents in 1971

Minor	Slight	Serious	Fatal	Total
843	98	26	17	984

These figures reveal a slight decrease in the total number of accidents and casualties as compared with the peak year 1970. This is attributed mainly to the run-down of development projects, particularly the sewage and water supply schemes. Police preventative measures included highway patrols, speed traps, and snap checks on driving licences, excessive loading and the condition of vehicles. A total of 2,066 speeding offences were detected in 1971, and 1,662 offenders were convicted. A number of cases are pending, and about 350 cases were filed as the offenders, mainly immigrant workers, left the State before summonses or compound notices could be served on them.

LAW AND ORDER

Special Branch

Intelligence gathering activities were maintained on a State-wide basis. The rural APO screen indicated its potential effectiveness during the course of several combined Police/Military and Commando exercises which were held during the year.

The Special Branch Training School provided in-service training courses throughout the year for Inspectors and Rank and File.

A section of men responsible for the personal protection of His Highness The Sultan was formed and received intensive training. This section, known as the PERMANENT ESCORT SECTION (PES) now occupies its own quarters in the Istana grounds and operates under Special Branch control.

Part V

Band

The Band were engaged on 68 occasions.

Radio Branch

HF Communications

The first phase of the HF Communication project was completed during the first half of 1971. The installation of the HF Control Console at Gadong HQ is still outstanding, due to late delivery from the manufacturers.

The second phase of this project will be undertaken during 1972 and will provide compatible facilities for the Kuala Belait Police District. Advantage of the site development at Panaga for the Reserve Unit has been taken to include a transmitter building and aerial farm.

VHF Communications

Extensive conversion to VHF radio communication has been undertaken at Police Stations within the Service Area of the Repeater Station at Bukit Kolam Ayer.

All Police Stations in the Brunei/Muara District have been equipped, and coverage of all roads tested and found adequate by traffic mobiles.

Tests in the Kuala Belait Police District indicate that excellent VHF communication is possible, and a changeover to the new frequencies is currently in progress.

LAW AND ORDER

The HF Station at Panaga will also accommodate the main Station equipment for VHF communication in that area of the State.

Fitters Workshops

The completion of a Workshop early in the year provided facilities for maintenance of generators and similar equipment used by the Force. It also provided a fitting bay where Police vehicles can be equipped with VHF radio sets and where maintenance can be carried out efficiently.

Transport

Five Austin Mini Bus, 14 Landrovers, two Holden Saloon Cars, one Bedford Bus and one Mercedes Benz were purchased during the year.

One bus, four vans, one truck, three landrovers and one motorcycle were written off during the year.

Reserve Unit

The Reserve Unit continued to provide assistance to Police Districts in patrolling the less accessible areas of the State, and as reinforcements at major events. The Unit also provided Honour Guards on such occasions as H.H. The Sultan's Birthday at Bandar Seri Begawan, Kuala Belait and Tutong, on the Queen's Birthday, and at Openings of the High Court.

A second Company was formed early this year and was stationed in Bandar Seri Begawan. This Company now occupies part of the Bolkiah Camp and the old Band Barracks at Berakas. Both Companies are now almost at full strength and equipment.

Part VI

Welfare and Recreation

Supplies of sports equipment are adequate.

Films were screened at all Stations and the Reserve Unit twice a month.

Health

The general health of the Force remained satisfactory.

Honours

His Highness the Sultan honoured four members of the Force with various awards, and Her Majesty the Queen, seven.

Sixty-three members of the Force donated blood during the year.

Societies

The Commissioner of Police, in his capacity as Registrar of Societies, registered 15 new societies during the year; seven registered societies ceased to function.

Conclusion

The training and re-training of the Force continues to be a first priority, together with the need for adequate accommodation to allow immediate availability of manpower.

Government's recent approval of essential buildings and facilities at the Police Training School should in time allow for all basic training and re-training within the State.

Government's recent approval relating to the necessary accommodation of Police personnel in the Brunei Police District generally, should in time permit a greater Police effectiveness within the Brunei Police District than has been possible to date.

LAW AND ORDER

APPENDIX I

Comparative figures for the last three years of Approved Establishment and Actual Strength of the Force as at 31-12-1971

	Establishment			Strength		
	1969	1970	1971	1969	1970	1971
Gazetted Officers	24	27	31	21	24	27
Inspectors	52	57	64	48	55	53
Sgt/Majors	7	6	8	7	5	7
Sergeants	58	60	78	56	49	64
Corporals	134	130	170	125	120	144
Constables/Recruits	621	617	790	604	625	734
Total	896	897	1,141	861	878	1,029

In which is included the Band:

Band						
Director of Music	1	1	1	1	1	1
Inspector	1	1	1	1	1	1
Sgt/Major	1	1	1	1	1	1
Sergeants	4	4	4	4	4	4
Corporals	10	10	10	10	10	10
Bandsmen	37	45	45	42	45	44
Total	54	62	62	59	62	61

LAW AND ORDER

APPENDIX II

Distribution of Force Establishment as at 31-12-1971

	Commissioner	Dep. Commissioner	Asst. Commissioner	Superintendent	Dep./Asst/Suptd.	Chief Inspector	Senior Inspector	Insp/P./Inspector	Sgt. Major	Sergeant	Corporal	Constable
Royal Police Force Headquarters												
Headquarters	1	1	1		2			3		3	8	19
Band								1	1	4	10	45
Mobile Res/Unit					1			2		5	15	56
Mobile Res/Unit					1			2		5	15	56
Q. M. Store								1		1	1	3
Training				3	6			5	1	9	7	96
Crime					1			2		2		
S.B./HQ. and												
Brunei District			1	4	4		1	21	2	11	30	25
Permanent Escort						1		1		6	6	33
Section												
Radio Branch				1	1			2		2	4	22
Brunei District												
Uniform Branch				1				12	2	12	33	207
Radio Branch										1	1	9
Transport Branch											2	9
Uniform Branch				1				8	2	12	30	172
Special Branch				1				2		3	3	5
Radio Branch										1	1	9
Transport Branch										1	4	24
Total	1	1	2	11	16	1	1	62	8	78	170	790

LAW AND ORDER

(b) Prisons

The State's Rumah Penjara at Jerudong has an accommodation for 100 prisoners. Female prisoners are housed in the barrack quarters which have been converted and adopted for use as a female prison. There is also a separate accommodation for youthful offenders. In addition, there are several small prisons and lockups in the State under the charge of Police.

The Superintendent of Prisons is the head of department and is responsible for the penal administration in the State. The staff is made up of the following:—

1. Superintendent of Prisons	1
2. Assistant Superintendent of Prisons	1
3. Warden	1
4. Assistant Warden	Vacant
5. Gaoler	1
6. Prison Officer	Vacant
7. Parole Officer	Vacant
8. Chief Warder	1
9. Assistant Matron	1
10. Sergeant Warder	3
11. Corporal Warder	5
12. Warder and Wardress	38 (1 Vacant)
13. Clerk Grade "A" Special Appointment	1
14. Clerk Grade "A"	1
15. Clerk Grade "B"	1
16. Peon	1
17. Storekeeper	1
18. Handwork Instructor	1

LAW AND ORDER

During the year under review the Assistant Warden was promoted to the rank of Warden, a Sergeant Warder was promoted to the rank of Chief Warder, a Corporal Warder was promoted to the rank of Sergeant Warder and a Warder was promoted to the rank of Corporal Warder.

Eight Warders were recruited. Six probationary Warders resigned while still on probation, one Warder resigned with one month notice before completion of agreement. The Prison Officer and the Chief Warder retired on pension.

The following is the summary of the estimated budget for the year review:—

(i) Total Personal Emoluments	\$251,977
(ii) Total other charges	
Annually recurrent	73,300
(iii) Total Special Expenditure	33,900
Total	\$359,177

A total of \$4,238.50 was collected from the sale of prison industries.

Vocational guidance and education are conducted to cultivate the spirit of labour and to give inmates the knowledge necessary for their specific vocations and eventually to lead them to create a resolution of self-support by their own labour.

Male prisoners are assigned to various jobs, namely carpentry, gardening, simple farming, cooking and cleaning of the prison compound and buildings. They are assigned to any one of these jobs in accordance with their ability, character and adaptability. Female prisoners are employed on household duties and undertake sewing and mending as occasion demands.

Apart from vocational training, prisoners are encouraged to attend Malay-medium classes in the prison. Classes are conducted in the evenings and at weekends by the Education Department.

Muslim prisoners are given facilities to say their prayers in the prison itself and during the month of Ramadhan they are allowed to observe the fast.

Every evening inmates are allowed to play games such as badminton, volley-ball, ping-pong and sepak raga.

LAW AND ORDER

The prison has a small but popular library where reading material in Malay, English and Chinese are provided. Radio listening is permitted daily and film shows are given fortnightly.

A senior Hospital Assistant paid two visits a week to the prison to give treatment to prisoners when required. Emergency or serious cases were brought to the General Hospital for treatment. The health of prisoners was generally good throughout the year.

Visiting Justices made frequent visits to the prison. They received no major complaints from the prisoners and reported favourably on the prison compound and building and on the treatment of the prisoners.

The Visiting Justices appointed for the year 1971 were:—

1. Awang Puasa bin Tudin
2. Awang Ali Akbar bin Abu Bakar
3. Awang Ahmad bin Jumat
4. Awang Hamdani bin Abd. Rahman
5. Awang Yunus bin Haji Hussain
6. Awangku Omar bin Pengiran Sabtu
7. Awang Kassim bin Daud
8. Awang Hussain bin P.O.K. Di-Gadong Haji Mohd. Yussof
9. Awang Daniel F.K. Wong
10. Awang Yahya bin Mohd. Yusof
11. Awang Haji Mohd. Jaafar bin Daud
12. Awang Lim Jock Seng

Juvenile offenders are either sent to Rumah Penjara, Jerudong or the Sarawak Approved School for detention. During the year under review one offender was in detention and one was in detention and one was discharged from the Sarawak Approved School.

A proper Boys' Home has not yet started although the sum of \$500,000 has been approved.

During the year under review there was no escaped and no execution.

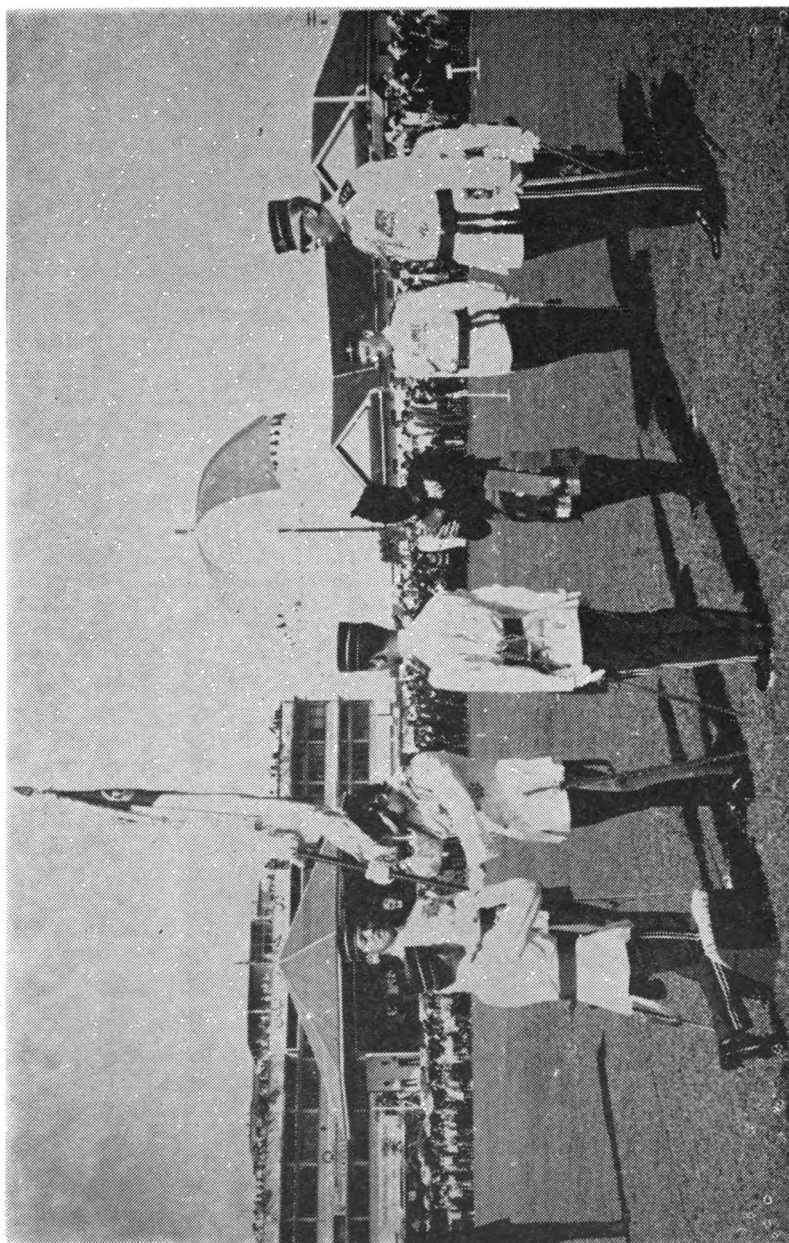
LAW AND ORDER

Prisoners are classified as follows:—

Recidivits;
First offenders;
Female offenders;
Under remand;
and young prisoners.

The following gives the classification by race, age group and length of sentence for the year under review:—

(i)	Classification by race:	
	Malay	43
	Chinese	17
	Iban	68
	Others	4
	Total	132
(ii)	Classification by age group:	
	20 years and under	37
	21 years to 30 years	61
	31 years to 40 years	17
	41 years to 50 years	7
	Over 50 years	10
	Total	132
(iii)	Classification by sentences:	
	Under remand	61
	Under 1 month	44
	1 to 6 months	23
	7 to 12 months	3
	13 to 24 months	1
	Over 2 years	—
	Total	132



(c) Royal Brunei Malay Regiment

General

The roles of the Regiment remain:

1. Deterrence to any outside power or intervening directly or indirectly in the State and to any subversive elements actual or potential operating in the State.
2. Public Order in support of the Police and Civil Power.
3. Counter Revolutionary Operations both jungle and urban.
4. Community Relations by which the Regiment is identified with the Government and Civil population.
5. Provision of troops for State Ceremonial functions.

The Regiment remained operating on functional organisation. The formation of a 5th Rifle Company in July 1971 strengthened further the viability of the land force elements.

Personnel

Command of the Regiment changed on 4th December 1971 when Colonel Dato B.F.L. Rooney D.P.M.B., O.B.E. succeeded Colonel Dato J.J.H. Simpson P.S.P.N.B., D.S.N.B., D.K.G.

The strength of the Regiment on 31st December 1971 was 72 Officers and 1202 other ranks. This strength includes Seconded British personnel from the Army, Royal Navy and Royal Air Force whose specialist knowledge are still required in the Regiment. The services of the seconded Malayan Other Ranks (MOR) of the British Army are also being retained. They are now being employed on contract in the Regiment as their services with the British Army were terminated on disbandment of the MOR elements.

Training

In 1971 three major exercises were carried out during the period 15th April to 21st May 1971. Exercise LAST FLYING was set by the Regiment for 2nd Battalion 2nd King Edward VII's Goorkha Rifles (2/2 GR). Elements of the Royal Brunei Malay Regiment took part in the exercise which was carried out in the Temburong District from 15th April to 24th April 1971. This was followed by Exercise SENANG JALAN which took place in Brunei/Muara and Temburong Districts from 27th April to 7th May 1971. A visiting sub-unit of the British Army from the United Kingdom took part in the exercise in conjunction with the Regiment.

LAW AND ORDER

The most ambitious exercise was Exercise NEW LOOK II which took place throughout the State in May 1971. This exercise was set jointly by the Regiment and Headquarters 3 Commando Brigade Royal Marines, 40 Commando Royal Marines, Artillery, Engineer and Air components of 3 Commando Brigade and 2/2 GR also took part in the Exercise besides the Royal Brunei Malay Regiment.

Sub-units of the Regiment carried out small scale exercises throughout the year.

A number of men were sent overseas for training. The Regiment for the first time sent two officers for staff training. The two officers successfully completed their course at Staff College, Camberley, England and Staff College, Queenscliff, Australia at the end of 1971. Four officer cadets were commissioned by December 1971 having successfully completed their training at Officer Cadet School, Portsea, Australia.

Four trainee pilots under went basic helicopter pilots course at South East Asia Helicopter (Sdn.) Berhad, Kuala Lumpur. They should qualify for their wings in early 1972.

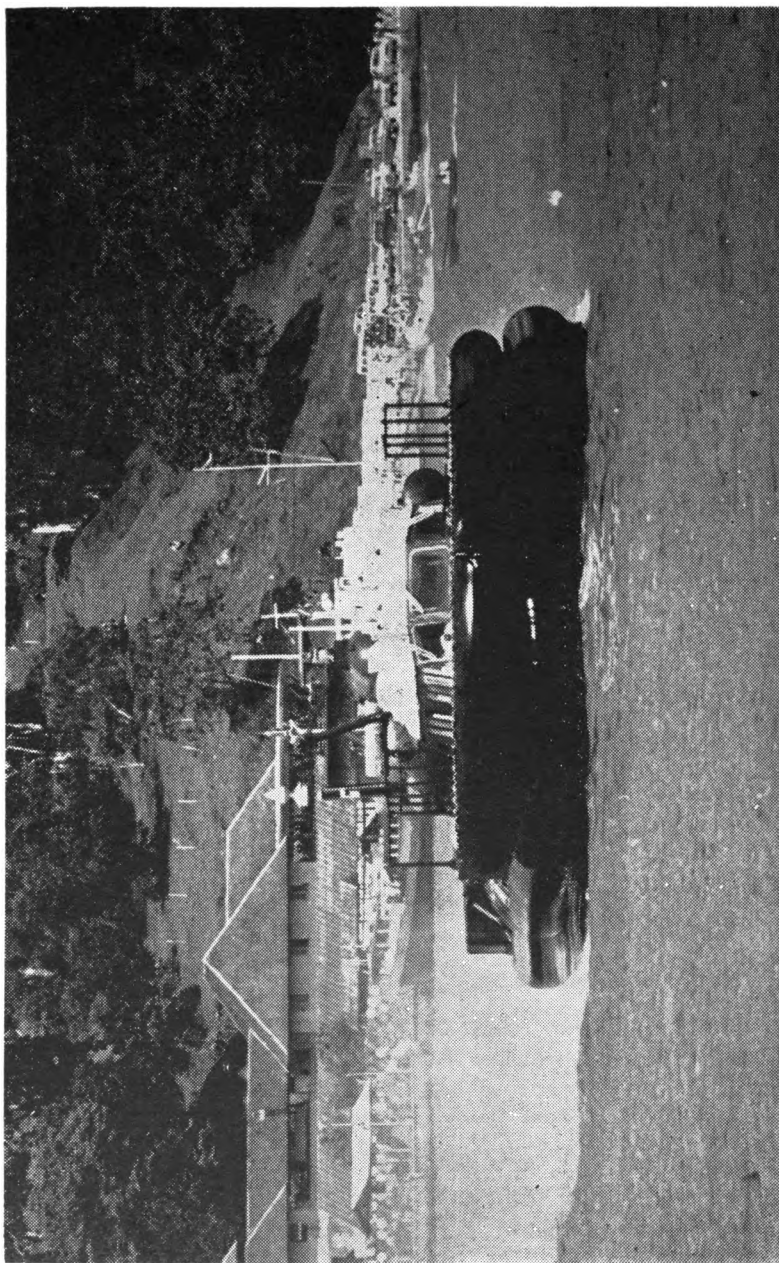
In summary, the numbers attending courses overseas were as follows:

To	Officers	ORs
UK	5	32
Australia	7	1
Singapore/Malaysia	4	27
Hong Kong	—	2

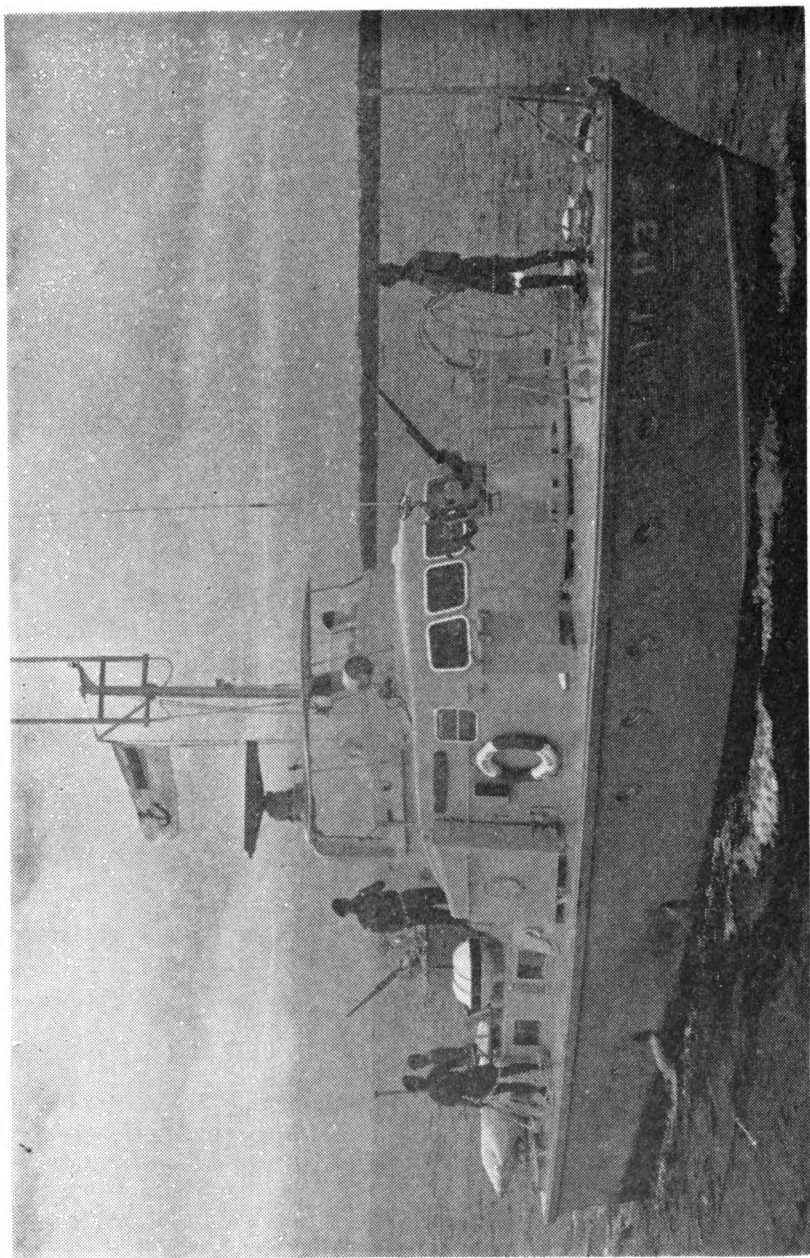
Civil Community Relations

Combat Engineer Troop completed a number of projects in the Temburong District. These projects which included the construction of jetties and wooden bridges and the clearance of rivers were designed to give people in the rural areas more facilities, and an improved communication.

The Air Wing carried out 2007 sorties which comprised 2272 flying hours including 98 medical evacuations. The majority of the sorties was shared by the Medical Services Flying Doctor and the Regiment's operational needs.



One of the equipments of the Royal Brunei Malay Regiment — the Hovercraft.



..... and another equipment — a patrol boat.

LAW AND ORDER

In early 1971, an Army Cadet Corps was formed under the auspices of the Regiment. Four schoolboy cadet platoons were formed in major schools in the State. The aims of raising the Cadet Corps were to enable schoolboys to learn the tasks and responsibilities of the Regiment, to install into them a sense of discipline and to develop their leadership qualities. Initial application to join greatly exceeded capacity. However, it was envisaged that three more platoons would be raised to bring the total to seven platoons.

Equipment

The two Wessex Helicopters have been sold and replaced by two Bell 212 helicopters. Two further Bell 206 Jet Rangers designed as gunships arrived in February 1971. With these new arrivals the Regiment's Air Wing now consists of:

- 2 Bell 212 helicopters — medium lift helicopters.
- 2 Bell 205A helicopters — medium lift helicopters.
- 4 Bell 206 Jet Rangers — communications and gunship helicopters.

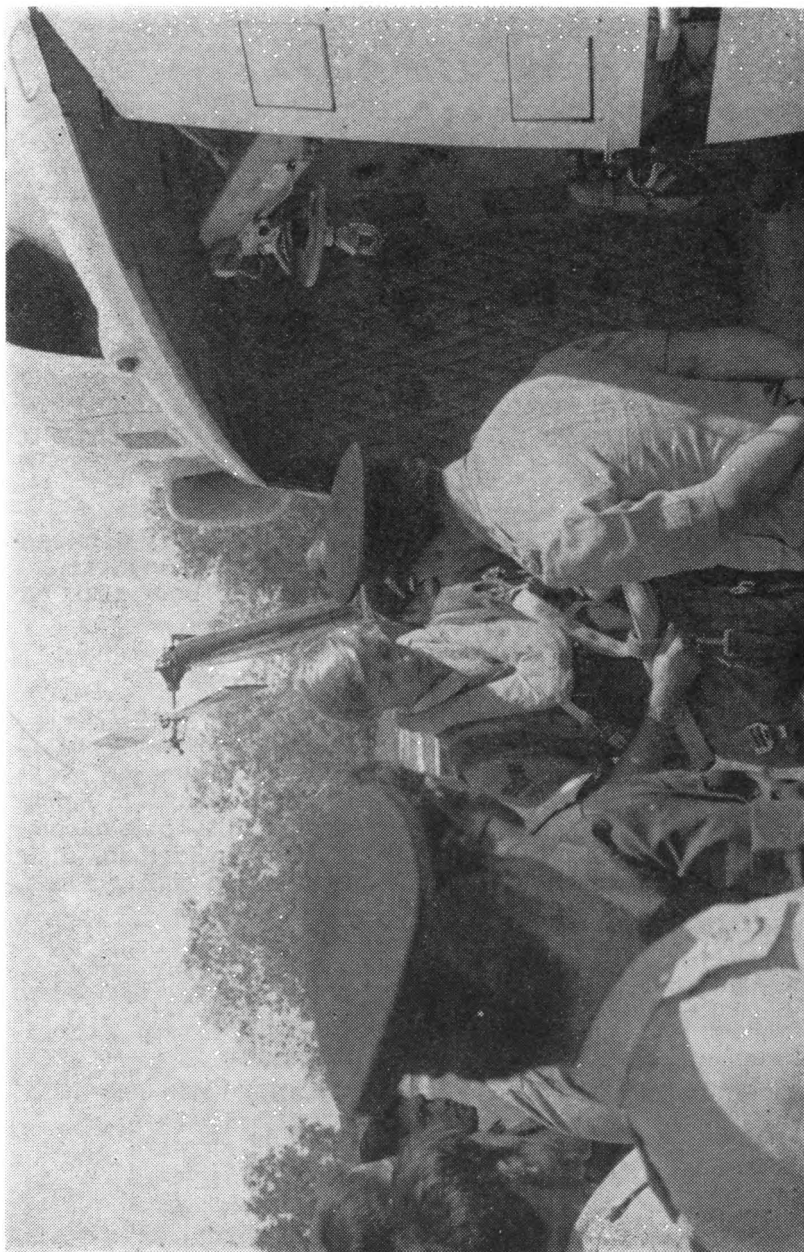
His Highness The Sultan's Flight was established in January 1971 with the arrival of HS 748. It has been in regular service as a trooping and freight aircraft when not required for VIP flight.

With the arrival of the two 62 foot Raja Isteri Class Coastal Patrol Boats in February 1971 and the SRN 6 hovercraft in May 1971 the Flotilla has sufficient craft for effective coastal surveillance for short periods.

Tampella mortars have replaced British 81mm mortars in 1971 as Tampella spares and ammunition are readily available in Singapore.

Camp Development

Among the major projects completed in 1971 were 44 units of married other ranks quarters, six flats for married non-commissioned officers, and four units of senior officers quarters. Work on the rifle range was completed when the electronic target device was installed in December 1971. Work on six blocks of single other ranks barracks, two blocks of G type married quarters and the Signal Centre Complex was in progress and scheduled to be completed early 1972.



Officers and men of the Fire Brigade receiving Helicopter Training.

(d) Fire Brigade

General Survey of the Year

Apart from an increase in establishment of 15 firemen there was no expansion in the Brigade. However Fire Prevention increased quite rapidly and much work and report writing occupied the staff to an extent of overloading the clerks causing some delay in correspondence.

Emergency calls increased from 258 to 319 an overall increase of 25%. This can be attributed to two associated conditions. Fire Stations have been built over the last two years and, as they become aware of the facility, the general public have co-operated by reporting calls, particularly people passing by in cars, stopping at fire stations enroute to make their report. The tragic death of two teachers at the Anthony Abell College, Seria in a gas explosion is described elsewhere in this report.

The first two officers of the brigade to attend a prescribed course at the Fire Service Technical College Moreton-in-Marsh, England returned in November this year having both qualified as Breathing Apparatus Instructors.

Operational Strength

After an increase in authorised establishment of 15 firemen, 18 recruits were enlisted but by the end of the year 34 vacancies existed. The number of firemen vacancies are largely the result of resignations of men joining the Brunei Shell petroleum Safety Department as firemen, where, not only can they obtain comparable salaries but accommodation is also provided for their families, a big inducement for men employed on shift systems.

1. Number and Type of Vacancies

Station Officer	— 6 vacancies
Asst. Station Officer	— 8 vacancies
Fireman	— 18 vacancies
Clerk Grade "B"	— 1 vacancy
Cook	— 1 vacancy
Total	34 vacancies

2. Promoted

To Divisional Officer — S. O. Wahabi bin Metussin promoted to Divisional Officer with effect from 1-2-1971.

LAW AND ORDER

To Station Officer

The following Assistant Station Officers promoted to Station Officer on one year's probation with effect from 1-9-1970:—

1. ASO. Abu Bakar bin Haji Ali Hashim;
2. ASO. Ahmad bin Md. Yusof;
3. ASO. Sajir bin Haji Hassan;
4. ASO. Salim bin Saidi; and
5. ASO. Omar bin Haji Md. Said.

To Asst. Station Officer

The following Firemen promoted to Assistant Station Officer with effect from 1-2-1971:—

1. FN. 74 Haji Ibrahim bin Ghani;
2. FN. 69 Hitam bin Sidek;
3. FN. 89 Md. Hussin bin Md. Salleh, and
4. FN. 127 Awangku Bakar bin Pengiran Hitam.

3. Advancement in Class

To Second Class Fireman:—

- | | | |
|--------------------------------|---|----------------|
| 1. Md. Tahir bin Haji Mastan | — | w.e.f. 1-10-70 |
| 2. Damit bin Salleh | — | w.e.f. 1-10-70 |
| 3. Ramlee bin Abu Bakar | — | w.e.f. 1-10-70 |
| 4. Awangku Yusof bin Pg. Besar | — | w.e.f. 1-10-70 |
| 5. Zaini bin Maidin | — | w.e.f. 1-10-70 |

Building and Equipment

Despite the desperate need for stations at Seria and Kuala Belait, no new accommodation was provided this year. The Headquarters Station at Bandar Seri Begawan is now becoming overcrowded as, being the oldest station in State, no provision was made for extending the premises if required. However a decoration programme has improved conditions somewhat.

Two new water tankers were purchased during the year and the Brigade is now equipped as follows:—

Turntable Ladders	—	2
Pump Escapes	—	4
Pumps (including Land Rovers)	—	13
Trailer Pumps	—	9
Portable Pumps	—	9
Emergency Tender	—	1
Hose/foam lorry	—	1
Personnel/equipment carriers	—	3
Water Tankers	—	2
Fire Floats	—	3
Speedboats	—	1

LAW AND ORDER

Summary of Call

Types of Call	B.S. Begawan	Bangar	K. Belait	Muara	Seria	Tutong	Total
Domestic Premises	8	—	2	1	2	3	16
Commercial	9	1	2	—	4	3	19
Jungle/Grass	35	3	17	19	40	74	188
Motor Vehicles	16	—	—	—	2	4	22
Electrical	4	1	1	1	—	—	7
Miscellaneous	3	—	—	—	—	—	3
False/Good Intent	8	—	2	—	1	—	11
False/Malicious	3	—	1	—	—	—	4
Special Services	22	—	—	—	—	4	26
Outboard Engines	—	1	—	—	—	—	1
River Rescue	1	—	—	—	—	—	1
Controlled Burning	4	—	—	—	—	1	5
Special Requests	13	3	—	—	—	—	16
Total	126	9	25	21	49	89	319

LAW AND ORDER

The following increases over last year are to be noted:—

Domestic Fires increased	from 1 to 16
Commercial Fires	from 6 to 19
Jungle/Grass	from 110 to 188
Motor Vehicles	from 13 to 22
False Alarm Good Intent	from 5 to 11
False Alarm Malicious	from 1 to 4

Overseas Training

In England:

D.O. Wahabi bin Metussin and ASO. Mohd. Saad bin Taib underwent officers training course in United Kingdom at various centres under the Home Office, Ruskin Avenue Kew Richmond Surrey for a period of three months with effect from 17-8-1971.

In Hongkong:

ASO. Awangku Ahmad bin Pengiran Apong and ASO. Awangku Omarali bin Pengiran Idris are undergoing a full six months' officers training course in Hongkong with effect from 4-12-1971.

In Malaya:

SO. Pengiran Daudin bin Pengiran Haji Tengah, SO. Sajir bin Haji Hassan and SO. Abu Bakar bin Haji Ali Hashim underwent officers training course at Fire Service Training School, Kuala Lumpur for a period of five months with effect from 14-3-1971.

SO. Hussin bin Hassan, ASO. Md. Yusof bin Ibrahim and ASO. Md. Jahari bin Ahad are undergoing an Instructors Course at Fire Services Training School, Kuala Lumpur, Malaya for a period of six weeks with effect from 21-11-1971.

The two officers who went to England were the first to attend specific courses and both qualified as Breathing Apparatus Instructors, a very comendable result on a course which combines instructional techniques with tough physical demands. The two officers with Hongkong Training School attended two English courses with the Royal Brunei Malay Regiment to improve their language standard before going to Hongkong. Their keenness is typical of the type of officer now appearing in the brigade.

Local Training

One Station Officer and two Assistant Station Officers have been detailed as instructors and a modest beginning has been made on practical training. A one month's refresher course has been programmed and within two years all firemen will have attended this course after which the syllabus will be re-programmed for more advanced work.

This type of training has to be restricted, at present, to practical work using the yard and drill tower at Muara Fire Station because of lack of accommodation. Before the work of this section can be increased suitable premises will have to be found or built.

Co-operative training with the Royal Brunei Malay Regiment Air Wing has commenced with the view to transporting men and equipment to inaccessible fires. The emphasis is on off-shore work: should a ship report a fire aboard, a fire-fighting force can be winched aboard to assist the captain in his attack until the ship reaches port.

Fire Prevention

This has increased to such an extent that a trainee Fire Prevention Officer was found early in the year to assist the Controller. Much of the work was initiated by the Municipal Boards and three types of inspection are now being carried out.

- (i) **Surveys:** A thorough and comprehensive examination covering every aspect of fire prevention and protection of the premises.
- (ii) **Specific:** A limited inspection confined to specific aspect of fire prevention (e.g. safety in the use of household gas).
- (iii) **Routine:** A periodic inspection normally carried out at regular intervals.

Some 30 full surveys were carried out and full reports prepared. A further seven full reports were made on drawings submitted for fire brigade requirements and recommendations.

Twenty eight specific surveys were made and this included inspecting 14 schools where gas is used. In addition seven visits were made to assess the fire-fighting equipment required in new or altered premises.

At the request of the Municipal Boards six cinemas in Bandar Seri Begawan, Seria and Kuala Belait are inspected every month and reports made to the individual Board Chairman.

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At the request of the Municipal Boards six cinemas in Bandar Seri Begawan, Seria and Kuala Belait are inspected every month and reports made to the individual Board Chairman.

The maintenance scheme for extinguishers in Government premises has been continued and efforts are being made to check, catalogue and find that equipment which has been supplied by private contractors for Government schemes and have therefore been neglected in the past.

Fires of Special Interest

On 17th March 1971, two teachers at Anthony Abell College died as a result of injuries sustained in an explosion, which occurred at approximately 7.15 a.m.

Due to a leak in the supply pipe, local towns gas had accumulated within the metalwork room and, when the two masters enter the area in preparation for the day's lessons some unknown agent ignited the gas causing widespread damage in the area. Prompt aid from fellow teaching staff failed tragically to save the lives of the two men involved.

On 24th March 1971, an explosion occurred in a bitumen tank at the site of the new international airport.

About six tons of bitumen were being prepared by heating, as a preliminary to the main task of supplying hot compound for the runway. An excessive build-up of pressure probably due to insufficient venting blew out one end of the tank. An employee close by was badly burned by hot bitumen. Firemen covered the remaining bitumen with foam and cooled the tank.

A defective kerosene stove caused a fire in a private house at Kuala Belait on 15th July, 1971. Two jets from one fire appliance failed to prevent severe damage being sustained by the building.

A serious fire occurred in saw-mills adjacent to the Tutong River. The fire was discovered by a passing motorist on the Tutong-Seria road and he made a report to the fire station at Tutong at 10.20 p.m. on 27th July, 1971. Six jets were used to fight the fire, water being obtained from the river using three pumping appliances.

The Bendahara's house in Bandar Seri Begawan was destroyed by fire on the 30th July, 1971 the call being received from a small boy at the station at 11.06 a.m. Six jets were used working from hydrants and by pumping water from the river by the fire-floats. Nine appliances attended this fire.

A spillage of Calcium Carbide on board the M.V. "Union" resulted in the production of acetylene when the carbides became damp. The use of water would have made the situation worse and the fire was extinguished by using sand.

LAW AND ORDER

A leakage of gas in the kitchen of a restaurant ignited and gave the firemen a difficult job on the 5th floor of a building in Bandar Seri Begawan at 7.00 a.m. on 19th October, 1971. Two employees were burned and removed to hospital where they were detained. Two jets were used to extinguish the resulting fire.

Five contractors barracks were severely damaged by fire as follows:—

Area	No. of jets	Appliance	Date	Time	Injured
Jalan Muara					
B.S. Begawan	4	3	6-5-71	2.08 a.m.	2
Muara	3	3	29-5-71	9.55 p.m.	nil
Seria	3	4	6-6-71	12.25 p.m.	nil
	(including B.S.P.)				
Jalan Muara					
B.S. Begawan	2	2	25-8-71	1.45 a.m.	4
B.S. Begawan	2	2	7-9-71	9.18 a.m.	nil

Of the many jungle/grass fires two are worth nothing as being "difficult". One occurred at the southern end of the airport runway and the brigade were occupied for four days in an effort to prevent smoke interfering with the flying schedule of the airport. Between flights valuable help was rendered by the airport fire brigade. The other incident occurred in the forest reserve at Sungai Tali where both members of the fire brigade and Forests Department worked side by side for three days to prevent damage to an area of the reserve.

One incident is worth recording here that is unconnected with fire fighting but shows the services rendered by the brigade to the public. At 2.30 p.m. on 9th May, 1971 a boat capsized in Sungai Lampai and 15 people floundered in the water. All were rescued by the brigade's fire-float.

Many fires are small in nature and can be dealt with by firemen using beaters, extinguishers and hose reels. The larger type of fire requires the use of fire hose and jets to provide larger quantities of fire-fighting water. The larger fires are tackled by a number of jets as follows. Fire requiring:—

1 jet	2 jets	3 jets	4 jets	5 jets	6 jets
52	28	6	3	1	2

Finally it must be put on record the valuable assistance given by police and Brunei Shell Petroleum Department, Seria. The police have supplied men for fire-fighting in certain areas but elsewhere it has been noted that the timely appearance of police personnel at incidents controlling traffic and crowds has allowed firemen to get on with their job unobstructed. The co-operation between Brunei Shell Petroleum Fire Brigade and the State personnel is improving tremendously and their assistance is greatly appreciated.

CHAPTER 10

COMMUNICATIONS

(a) Postal Services

The number of post offices and postal agencies in the State remained unchanged as in 1970, i.e. seven post offices, situated in Bandar Seri Begawan, Muara, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Labi and two postal agencies functioning at Lumapas and Rambai. Postal facilities including the sale of stamps, postal orders, money orders, both ordinary and telegraphic service, savings bank etc. are available at the Bandar Seri Begawan, Kuala Belait and the Seria Post Offices while the smaller offices and the agencies undertake the sale of stamps and the receipt and delivery of ordinary and registered articles only.

Mails to and from one post office to another at the above places are conveyed by postal vans or outboard launches. As soon as the mails are unloaded at the Brunei Airport from other postal administrations, they are transported to the destinations in the State within a very short time.

The Bangar Post Office in the Temburong District is connected with the General Post Office mainly by the Marine Department outboard launches three times a week, that is, on Mondays, Wednesdays and Saturdays and mails to and from Labu also in the Temburong District are conveyed by the same means twice a week. Mail communications between Labi in the Belait District and other places are channelled through the Seria Post Office and a house to house mail delivery service is provided in this area on normal working days.

Weekly surface mails to Brunei are landed directly from ships coming from Singapore and sorted out in General Post Office, Bandar Seri Begawan before distribution. In addition to the weekly overseas surface mails, regular and daily overseas air mail services are also maintained.

In the large towns in the State such as Bandar Seri Begawan, Seria and Kuala Belait except on Fridays, Sundays and other public holidays, a house to house delivery service is provided. Pillar boxes for the receipt of letters are installed at important road junctions and other public places in the various districts and these are cleared once or twice daily except on Sundays. A daily mail delivery service is also provided in the river kampongs by the riverine post offices.

COMMUNICATIONS

Three commemorative issues of postage stamps were placed on sale in 1971 and the sales of these stamps were for a period of more than three months respectively. These three issues of stamps were:

- (a) The 10th Anniversary of the Royal Brunei Malay Regiment released on 31st May, 1971.
- (b) The 50th Anniversary of the Royal Brunei Police Force sold on 14th August, 1971.
- (c) The Installation of Y.T.M. Seri Paduka Duli Pengiran Perdana Wazir commenced sale on 27th August, 1971.

Numerous orders from abroad especially from philatelists were received and executed.

Money orders issued during the year totalled \$698,964.00 whilst those cashed amounted to \$60,194.00 compared with those issued in 1970 amounting to \$699,800.00 and those cashed totalling \$62,186.00. Postal orders sold during the year amounted to \$182,661.40 and those cashed totalled \$43,778.35 as compared to 1970 sold \$190,505.00 and cashed \$29,426.00. Stamps sold totalled \$916,351.56 compared to \$759,580.00 collected in 1970.

COMMUNICATIONS

(b) Telecommunications

Telegraphs

Teleprinter circuits were maintained internally and externally to Kota Kinabalu and the International Telegraph Centre at Kuala Lumpur

The Singapore and Kuching circuits remain hand Keyed morse.

Service is available to most countries in the world.
Outgoing traffic figures are given below:—

No. of words transmitted to Countries Outside Borneo

Year	Private	Government	Press	Total
1966	489,770	239,339	14,395	743,504
1967	578,630	228,056	52,707	859,393
1968	687,230	153,296	47,675	888,101
1969	835,826	128,449	144,436	1,108,711
1970	697,834	107,737	130,780	936,351
1971	888,053	119,591	92,177	1,099,821

The decrease in telegraph traffic experienced in 1970, due to the introduction of telex, has been regained.

The incoming telegraph traffic figures for 1971 are comparable with the outgoing figures:—

Private	Government	Press	Total
897,960	40,997	1,614	940,571

Telex

A second line was connected between Brunei and the International Telex Switchboard in Kuala Lumpur. This enabled an increase of about 152% in outgoing traffic to be passed, totalling 87,489 chargeable minutes to 26 countries. Incoming traffic totalled about 82,000 minutes from 23 countries.

Traffic was largely distributed as follows, in chargeable minutes:—

Outgoing	U.K.	Singapore	Malaysia	Japan
1970	20,019	7,498	4,160	1,927
1971	37,754	15,547	17,371	10,892
Incoming				
1971	37,679	19,575	12,471	8,234

COMMUNICATIONS

Equipment was ordered to enable more subscribers to be connected and to improve service to Kuala Belait and Seria.

Private Telegraph Circuits

An A.F.T.N. teleprinter circuit between Brunei Airport and Kota Kinabalu Flight Information Centre was maintained and operated for the Civil Aviation Department.

A similar circuit for private operation was installed between Bandar Seri Begawan and Seria.

Telephones

Automatic Telephone Exchanges were maintained in Bandar Seri Begawan, Kuala Belait, Seria, Muara and Mile 6, Jalan Muara with small manual exchanges in Tutong and Bangar.

A 500 line extension to Kuala Belait Automatic Exchange started in 1970 was completed in May.

A trunk cable between the Seria Automatic Exchange and the L.N.G. site has been laid as far as the access road; final completion of the project will be in 1972 but in the meantime service to the L.N.G. site is by means of temporary aerial cable.

Laying and jointing of the Brunei-Muara trunk cable was started in late September but work is held up pending the construction of a roundabout at Simpang Muara.

An exchange area duct and manhole scheme for distribution cables has been constructed in Tutong and is 99% complete.

The installation of a 200 line PABX for the R.B.M.R. was started in October; it will be commissioned in February 1972.

Preliminary plans have been made for the establishing of a small automatic exchange in the Kampong Lambak area which should be operational in 1972. Land has been made available.

Improve and increased telephone service for the Brunei Garrison was agreed and a 25 line P.A.B.X. installed towards the end of the year; a 100 line P.A.B.X. will also be installed as soon as it is available.

Improvement have been made to local line distribution in the Bandar Seri Begawan area which should result in a reduced fault liability.

COMMUNICATIONS

During the year five small P.A.B.X's were installed in the Bandar Seri Begawan area and five in the Kuala Belait area. A total of 906 telephones were installed during the year as below:—

Bandar Seri Begawan	—	730
Kuala Belait	—	174
Seria	—	89
Bangar	—	2
Tutong	—	11
		906

In the same period 253 telephones were recovered, leaving a net gain of 653 stations for the year.

Telephones In use on 31st December

1966	1967	1968	1969	1970	1971
1,838	2,285	2,834	3,705	4,820	5,473

Trunk Call Traffic

External: Both ways traffic in chargeable minutes between Brunei and:

	1968	1969	1970	1971
Labuan	61,713	61,697	77,605	75,442
Kota Kinabalu	128,288	114,742	144,017	151,297
Sandakan	7,339	8,318	9,653	7,484
Tawau	5,254	11,367	12,242	7,508
Singapore	39,213	54,818	60,380	77,034
Kuala Lumpur	16,768	19,584	20,295	19,442
Hong Kong	13,481	20,925	16,708	17,854
Japan	1,424	4,945	5,673	8,012
Taiwan	571	1,560	4,379	7,598
United Kingdom	570	1,468	1,922	3,974
Australia	501	514	379	948
Others	236	853	1,574	3,838
Total	275,358	300,791	354,827	380,431

COMMUNICATIONS

The overall increase of about 7% in traffic was due to the limited number of circuits available. The most significant increase being with Singapore. Traffic with many more countries was passed resulting in the very high rate of increase to unspecified countries.

Internal and Sarawak: Traffic in chargeable minutes between Bandar Seri Begawan and:

		1968	1969	1970	1971
Kuala Belait	O/G	167,191	168,164	234,861	224,953
(inc. Seria)	I/C	153,706	158,308	221,007	257,859
Miri	O/G	21,124	26,857	32,198	31,207
	I/C	31,275	25,602	29,283	29,789
Sibu	O/G	305	180	154	372
	I/C	615	193	36	187
Kuching	O/G	227	160	585	2,674
	I/C	483	145	1,271	4,633
Total		374,926	379,609	519,395	551,674

The increase of 6% in traffic is unexpected low. This, and the reversal of greatest flow, may be due to some development projects having reached their peak and neared completion.

Radio

All external communications and internal trunk routes, with the exception of the Kuala Belait-Seria trunk cable, were provided by radio bearers.

The "Ulu" H.F. scheme was maintained to provide essential service to 26 remote villages.

Equipment to further strengthen and extend the trunk system was ordered.

Radio and electronic equipment installation and maintenance for other departments remains a heavy burden on the radio staff

COMMUNICATIONS

The work entailed in frequency allocation and licensing continues to increase. 85 licences were issued and 138 frequency allocations made, compared with 30 in 1970. No separate section deals with these and the work involved falls mainly on the technical staff.

General

The vacant post of Chief Supervisor was at last filled and the abilities of the female operators considerably improved as a result.

The post of Chief Telegraph Operator was also filled and improvements in the Telegraph Office expected.

For the first time arrangements were made for the telephone directory to be published by a commercial organisation and to contain a classified section. The extra work involved in producing the initial directory was very heavy but should result in less pressure on the clerical section in future. The first classified directory will be published in February 1972.

The most serious problem facing the Telecommunications Department is the shortage of skilled supervisory and technical staff. Twelve vacancies for Trainee Technicians have existed for four years but only two posts were filled by 1970. Increasing installations and resulting maintenance loads make it essential that suitable recruits are obtained to meet future requirements, otherwise there must be a deterioration in the service.

COMMUNICATIONS

(c) Press, Broadcasting, Information Services and Films **The Press**

There are three weekly newspapers in the State, viz: "The Borneo Bulletin", Brunei's oldest newspaper, reviews the news of the Borneo territories each week and has a circulation of 20,000 copies. It is published by the Brunei Press Limited in Kuala Belait and sells at 20 cents per copy. "Pelita Brunei" which is printed in Romanised Malay, is published gratis by the Department of Broadcasting and Information and issued to Government employees and to the general public. It is printed by the Star Press in Bandar Seri Begawan and appears on Wednesdays. "SALAM" which is published by the Brunei Shell Petroleum Company Limited, in three languages, Romanised Malay, Chinese and English, is the Company's own newspaper and appears on Saturdays.

Brunei's only daily newspaper, "The Star", ceased publication on 9th January, 1971 after the Brunei Press had taken over the paper and printing business; the latter continued as a subsidiary of the "Straits Times" group. The Brunei Press is still the Government Printer which publishes the Official Gazette and the Enactments fortnightly.

Broadcasting and Information Services

Broadcasting commenced in Brunei on 2nd May, 1957 and there was a separate Information office at that time; in 1962 both were amalgamated under a Director and have since functioned as one department, the official mouthpiece of the Government, to keep the public informed on vital issues and the news of the day. The department maintains reading rooms in five centres throughout the State which are used by thousands of people, young and old, of all racial groups who can read daily newspapers and magazines in their own languages. These reading rooms are situated in Bandar Seri Begawan, Tutong, Seria, Kuala Belait and Bangar in the Temburong District.

The department also maintains 16 mm. film units in Bandar Seri Begawan and Kuala Belait which are used to give film shows in the various kampongs and long-houses in the State as well as at schools and other institutions. In addition to screening films, the department has a small film production unit which produces news-reels and documentary films for local exhibition. During 1971 it produced five news-reels and several film records of important State functions and Royal ceremonies.

COMMUNICATIONS

The department also supplies public address systems to schools and colleges in the State and for other public events when required. Field officers of the department tour the various country districts and give talks and set up audio-visual displays on matters of public interest.

At the department's headquarters in Bandar Seri Begawan there is an airconditioned auditorium capable of seating nearly 600 persons where film and stage shows are held from time to time. There are now several local amateur dramatic groups who produce plays and other entertainments as well as concerts in this modern theatre.

Cinemas

There are eight commercially operated cinemas throughout the State located as follows: Bandar Seri Begawan (3), Tutong (1), Seria (2), Panaga (1) and Kuala Belait (1). Films are screened in Malay, Chinese, Hindi, English and Japanese with captions in another language to that of the sound-track. This is the main form of public entertainment in Brunei. Many clubs also have regular film shows using 16 mm. films rented from a commercial agency in Singapore.

Radio Brunei

Programmes are broadcast by Radio Brunei on four channels in the medium wave band and on two channels in the short wave band (61 and 41 metres) in Malay, Chinese and English for a total of 182 hours per week. The present transmission schedule for the medium wave services consists of two groups with a short-wave transmitter tied to each group. Thus the Malay programme service is broadcast on 242m, 273m and on 61.6m; the English service is heard on 399m, 335m and 41.6m. The English and Chinese services also share transmissions on 242m, 273m and 61.6m at different times with the Malay service. The English service and the Gurkha programme share 305m, 335m and 41.6m during the evening hours.

The popularity of Radio Brunei programmes is not restricted to the local audiences; listeners from outside the State reported their enjoyment of these programmes in all three languages. There is a one hour programme every evening in Gurkhali for the benefit of the Gurkha battalion stationed at Seria. This programme was supplied by the British Forces Broadcasting Service in Singapore.

COMMUNICATIONS

Listener Research

The analysis of listener mail which commenced in 1965 continues to provide much useful information about Radio Brunei's audiences in and out of the State. The monthly average of letters received by the three language services was as follows:—

Malay	Chinese	English	Total
1,852	634	1,635	4,121

It is difficult to assess the number of listeners in the State of Brunei because there is no radio licence in force. Estimates can only be made on the basis of the importation and sale of radios and by observation. The advent of the transistorised radio receiver with its low cost and cheap power supply has increased the number of listeners everywhere and Brunei is no exception. Using the import figures of radios as a basis, it is estimated that there are at least 15,000 receivers in the State. In order to help the inhabitants of the remote villages, the Government has subsidised the sale of transistor radios which are sold to approved applicants on a straight instalment-payment over 12 months. These sets become the property of the applicants on the first payment of the monthly instalment and the returns show a very small rate of default in payment. Many hundreds of sets have thus been put into use by the poorer sections of the population, particularly in the isolated communities of the "ulu" (forest) where dissemination of news and entertainment has been lacking.

Establishment

The department is headed by a Director and a Deputy Director while the technical responsibility of the department is borne by the Chief Engineer assisted by a competent local and expatriate staff. The present strength of the department is 165 persons, with 12 part-time staff and 18 daily paid workers. The operations of Radio Brunei are dispersed among the headquarters building in Bandar Seri Begawan, and the transmitting stations of Berakas and Tutong. There is a satellite transmitter at Kuala Belait to serve that part of the State but studio facilities there were closed down during the current year.

COMMUNICATIONS

Training

In October 1971, Grade II Technical Assistant, Awang Mirhassan bin Haji Abu Bakar, was sent to England to undergo a three year course at the Mid Essex Technical College, Chelmsford, Essex. Facilities are being made available at the new Electrical Trade School in Kuala Belait for technical staff of Government Departments to receive advanced training in electronics and allied subjects. It is hoped to send several of the department's technical assistants to take these courses next year.

Annual Budget

The 1971 budget of the Department was \$2,265,208.00 of which personal emoluments amounted to \$1,250,135.00, annual recurrent charges to \$645,480.00 and special expenditure to \$366,593.00. The amount provided for the Department in the Development Estimates for 1971 was \$150,000.00.

COMMUNICATIONS

(d) Land Transport

General

There has been a general increase in every field of land transportation in the year 1971 especially in cargo transportation due to various development projects in the State. The number of commercial vehicles on the road has increased by 20% over the previous year and in addition there was an increase of 12% in the Government fleet.

Although the weights of these vehicles have been limited to a gross tonnage of 9 tons for 2 axel and 12 tons for 3 axel vehicles but the frequency of the usage of such vehicles on the road cannot be controlled particularly when the State Development Projects are in full swing. The effect of this situation on the road is and has been alarming.

Registration and Licensing of Motor Vehicles

There is a sharp decrease in the number of motor cycles and scooters. This is probably due to the motoring public is beginning to realise the danger on the road in use of motor cycles and scooters. But in spite of this, the aggregate increase is still greater than that of 1970 by 191 units of motor vehicles.

No. of motor vehicles licensed on the road as on December 1971

	1970	1971	Increase
Passenger cars	10,252	12,055	+ 1,805
Motor cycles & motor scooters	1,599	1,308	— 291
Commercial vehicles	2,084	2,513	+ 429
Taxis	106	107	+ 1
Buses	115	139	+ 24
Government vehicles excluding military vehicles	945	1,064	+ 119
Total	15,101	17,186	+ 2,085

The number of motor vehicles registered in each month in 1971 is as follows:—

Year	J	F	M	A	M	J	J	A	S	O	N	D	Total
1970	235	213	198	219	177	227	212	237	201	209	189	179	2,496
1971	198	112	235	195	181	179	202	191	191	200	185	209	2,278

COMMUNICATIONS

The decrease in the total for 1971 as compared to that for 1970 are due to

- (a) There has been very much less registration of motor cycle as in the previous year.
- (b) There is hardly any increase in the rate of registration of trucks and heavy vehicles over the previous year.

Driving Licences

There were 19,208 licensed drivers in the State in 1971 and 8,938 learner drivers. Out of the above 4,028 learner drivers took up driving tests.

Revenue

The total amount of revenue collected in the year \$837,552.00 as compared to \$715,769.00 in 1970, an increase of 17%. This does not include the amount which could have been collected in respect of 1,064 licences issued to Government vehicles and 1,116 licences issued to Government Officers under the Exemption Order.

Miscellaneous

Vehicle Inspectors were called by the Police to inspect 714 cases of accidents during the year and the number of motor vehicles involved in those accidents was 1,011. From these cases the Vehicle Inspectors concerned attended as witnesses in 177 traffic cases in court.

Public Transport

The changes of the type of buses in various routes from 12 passengers mini buses to 30—40 passengers buses have proved to be very successful. The most gratifying result is that more passengers go in buses now than ever before and the fares had gone down tremendously especially on the Bandar Seri Begawan and Seria Route where the fare went down from \$4.00 to \$3.00.

Although the scheme has not been run fully as planned, however it is hoped that by 1972 a complete success could be achieved.

(ii) **Taxis** — There are 107 taxis on the road now, but as one development project is completed less usage of taxis is experienced. However the possibility of operators over-charging passengers also causes less people to use taxis. Operators have been advised therefore that any demand for higher fares would only cause less passengers and hence less earnings.

COMMUNICATIONS

(iii) **Good Service Vehicles** — In the past there has been no restriction in the issue of licences to good vehicles. This was done in order to help bring down the high rate of freight charges in the past. However the time has come when the State is over flooded with goods vehicles which causes very keen competition among operators. This has kept the rates very reasonably low.

The Motor Transport Licensing Authority felt that it was time then to plan the control of good service vehicles. Initially it is planned to separate and identify goods service vehicles from ordinary goods vehicles. It is hoped that by next year proper control of goods service vehicle could be affected in the State.

(e) Civil Aviation

The Department of Civil Aviation continued to carry out extensive training and recruitment of staff in preparation for the opening of the new international airport. Unfortunately, due to delays in construction the airport, which should have been completed this year, is now not expected to be ready for full operation till late 1972 or early 1973. Meantime the training of staff for air traffic control services, meteorological services and the airport fire services continued both in Brunei and by sending of personnel overseas for courses.

The existing airport continued to operate regular scheduled services by Malaysian Singapore Airlines F. 27 aircraft, i.e. daily passenger services connecting with the main centres in East Malaysia and freight services to Singapore. A number of non-scheduled flights by chartered companies used the airfield during the year as well as military aircraft, an aircraft from the Brunei Flying Club and other flying clubs in neighbouring territories.

Statistics indicating passenger and freight traffic for the year are as follows:—

Aircraft Movements

	Landings	Take-Offs
Civil	4,358	4,358
Military	1,246	1,243
	Embarked	Disembarked
Passengers	45,269	47,039
Mail (Kilos)	19,049	27,335
Freight (Kilos)	190,689	740,554

Climatological summary for 1971 is attached.

BRUNEI
CLIMATOLOGICAL SUMMARY YEAR 1971 **LONGITUDE: 114° 56' EAST**
BRUNEI AIRPORT **LATITUDE: 04° 55' NORTH**

HEIGHT OR STATION: 141 FEET
ABOVE MEAN SEA LEVEL

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Means or Extreme
Mean 0800 hour Air Pressure at Mean Sea Level (Millibars)	1009.9	1008.4	1010.7	1009.7	1009.2	1009.7	1009.2	1009.6	1009.9	1010.4	1010.3	1009.6	12,114.2	1009.5

Mean 0800 hour
Air Pressure at Mean
Sea Level (Millibars)

Air Temperature in
Degree Fahrenheit

Mean of:

A — Maximum	85.6	84.9	87.0	88.9	90.1	90.3	90.4	89.0	89.2	88.5	88.0	87.4	1,059.3	88.3
B — Minimum	74.8	73.2	73.0	73.0	73.8	73.8	72.5	72.7	73.2	73.7	73.0	73.1	879.8	73.3
Means of "A" and "B"	80.2	79.0	80.0	80.9	81.9	82.0	81.4	80.8	81.2	81.1	80.5	80.2	181.0	15.1
Means of Diurnal Variation "A" and "B"	12.9	11.7	13.6	15.8	16.4	16.5	17.9	16.2	16.0	14.8	15.0	14.2		

Absolute Extremes:

Highest Maximum Date	88.1	18th	91.8	29th	93.2	1st	93.8	12th	92.9	8th	90.2	12th	1,107.0	91.8
Lowest Minimum Date	67.2	14th	70.3	69.3	71.8	19th	69.2	70.0	69.9	2nd	71.4	16th	841.5	70.1
Lowest Maximum Date	82.9	18th	78.1	84.0	86.2	28th	85.0	84.8	84.0	14th	83.7	31st	1,003.4	83.6
Highest Minimum Date	76.7	22nd	75.1	77.2	76.8	3rd	76.1	75.6	75.5	29th	75.1	4th	909.7	75.8

BRUNEI
CLIMATOLOGICAL SUMMARY YEAR 1971
BRUNEI AIRPORT

HEIGHT OR STATION: 144 FEET **LONGITUDE: 114° 56' EAST**
ABOVE MEAN SEA LEVEL **LATITUDE: 04° 55' NORTH**

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Means or Extreme
Rainfall														
Total (inches)	6.36	13.63	9.73	4.35	7.82	4.85	6.49	14.12	6.27	12.43	13.44	16.38	115.87	9.66
Duration (hours)	46.45	94.10	28.55	22.25	39.50	30.00	20.55	64.25	42.25	70.35	70.20	90.35	621.20	51.48
Number of wet days	17	22	15	13	19	15	13	19	20	19	21	23	216	18
Most in a day Date	1.54	3.17	4.62	2.42	1.47	1.44				3.61	4.42	3.22	33.00	2.75
Bright Sunshine	27th	25th	4th	20th	30th	14th	29th	17th	11th	31st	5th	31st	—	—
Total (hours)	172.55	144.10	191.10	238.00	248.70	196.65	239.05	221.20	199.65	180.60	168.50	179.05	2,339.15	194.93
Mean	5.57	4.09	6.16	7.93	8.02	6.56	7.71	6.81	6.65	5.83	5.62	5.78	77.97	6.13
Mean 0800 hour Relative Humidity	95	96	96	94	91	91	93	93	93	93	93	95	1119	93
Surface Wind														
Maximum Gust (knots)	26	26	26	19	32	38	32	32	26	33	26	36	352	26
Direction (Degrees)	010	220	210	360	330	230	210	160	230	200	210	220	Ver. 160° — 010°	
Date	22nd	17th	1st	12th	19th	14th	22nd	30th	11th	13th	9th	28th	—	—
Time (local)	1705	1240	1440	1625	1025	1530	1510	1350	1215	1450	1555	1305	Ver. 1025 — 1705	

APPENDIX "A"
The Rainfall Record For 1971

STATION	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Annual
(a) Brunei/Muara District													
Kilanas	6.03	14.14	6.57	2.95	10.24	5.57	3.86	13.79	6.87	10.68	12.72	13.07	106.49
Lumapas	7.65	20.09	3.68	2.43	8.77	4.33	3.37	10.39	10.04	8.80	10.36	13.46	103.37
Mulaut	6.54	13.94	7.20	2.59	7.94	5.20	3.59	18.48	8.19	11.03	13.29	19.36	117.35
Luahan	7.39	10.87	5.36	5.84	7.88	6.24	5.72	13.62	6.25	11.33	13.24	15.50	109.24
Kumbang Pasang	9.04	13.56	12.00	1.61	13.44	8.20	6.01	9.71	7.84	13.15	11.12	10.59	116.27
Semian Berakas	6.28	15.02	9.45	4.60	8.68	3.06	4.38	14.67	6.26	10.25	12.93	10.97	106.55
(b) Tutong District													
Birau	5.91	18.59	1.36	2.30	6.65	6.40	2.90	13.79	9.09	12.56	10.84	16.03	106.42
Pekan Tutong	7.55	12.63	3.16	1.91	3.97	5.38	3.19	16.65	6.21	11.07	8.12	19.81	99.65
(c) Belait District													
Mukim Labi	6.41	11.70	2.83	2.97	5.02	2.64	4.03	8.77	7.12	14.29	13.59	19.28	98.65
Sungai Liang	17.23	9.90	3.21	3.27	10.65	3.98	3.89	14.57	11.61	14.89	12.16	17.84	123.20
(d) Temburong District													
Labu Estate	14.44	25.69	9.42	6.51	13.43	6.54	6.61	22.87	20.63	18.10	17.19	19.90	181.33
Puni	7.98	12.70	10.25	4.45	4.99	5.59	5.60	12.06	10.35	9.68	11.71	15.58	110.94
Selangan	12.06	12.06	12.06	6.58	17.00	6.38	6.91	25.94	19.23	15.84	16.00	32.70	158.64

CHAPTER 11

WORKS, UTILITIES AND SUPPLIES

(a) Public Works and Utilities

Public Works — General

The increase in annual expenditure from \$36,000,000 in 1970 to \$39,000,000 in 1971 can be misleading in assessing the output of the Department, as a substantial element of this latter figure represents the major projects in hands of Consulting Engineers, and in which the Department's contribution was mainly of an administrative nature. In round figures a work programme of \$30,000,000 annually continues to be the utmost that can be expected from the Department's efforts, with staff and equipment as they are at present.

In future years, a sharp increase in Annually Recurrent Expenditure can be anticipated as the numerous technical services recently completed, or still in progress, including buildings, water supplies, roads and sewerage, become maintenance liabilities.

Out of the 20 Civil Engineering posts 13 are filled, three of them by graduates seconded to Consulting Engineers for training on large construction projects and consequently making no large construction projects and consequently making no contribution to the Department's output. Of the five Architectural posts three are vacant, while vacancies also exist for one Chief Technical Assistant and eight Senior Technical Assistants. It is possibly not appreciated that very few indeed of these technical officers hold the qualifications and training which their appointments normally require.

It is anticipated that a number of graduate Engineers and Architects may be expected from their respective colleges in the near future, but the deficiency in more senior officers, mentioned above, raises problems over the professional training within the Department of these new recruits.

The manual labour force at the end of the year consisted of 1,370 daily rated and 804 monthly rated men, the latter being mainly skilled workmen in the categories of Tradesmen, Plant Operators, Drivers and the like.

WORKS, UTILITIES AND SUPPLIES

Difficulty was experienced in finding full employment for the large numbers of Earth-moving Plant Operators, who have worked for many years on Road Development Projects, having in the course of time gained much useful skill and experience in their duties, and who will be of great value when the next Road Development Programme materialises.

Site preparation, and incidental work associated with the new Airport, proved to be useful outlets for such men and their machines, but the problem is becoming increasingly acute.

While there was no general shortage of labour it was on occasion difficult to lay hands on an adequate number of men for arduous and unpleasant tasks, particularly from amongst employees in urban areas. The continued employment of the more highly skilled expatriate tradesmen, mainly for departmental workshops and machine shops, proved to be necessary, with no immediate prospect of their replacement by fully experienced locally born artisans.

The total personnel strength of the Department as on 31st December 1971, was:—

(a) Engineering & Professional	20
(b) Administrative and Clerical	109
(c) Technical	56
(d) Supervisory (Overseers, Mandores, etc.)	125
(e) Manual	2,174
Total	2,474

This compares with 2,575 in 1970 and 2,679 in 1969.

Contractors

The position regarding both the capacity of contractors and their system of operation remained largely unchanged, the number who contributed effectively towards the works programme of the Department representing only a small proportion of those registered. The necessity for a contractor to have a firm grounding in his particular trade, adequate workshops and other premises, and a sufficiency of plant and labour, is not fully appreciated. Many of the smaller firms obviously operated purely as middlemen with resources consisting of a little more than a post box number and possibly a vehicle.

WORKS, UTILITIES AND SUPPLIES

The better organised local contractors however played a substantial part in the large development projects assigned to firms of Architects and Engineers, indicating that as far as building work was concerned only the most extensive and complex schemes would be beyond their capacity, provided that they confined their activities to a single project.

Overseas contracting firms displayed less interest in work in Brunei and it would appear that a number of those to whom contracts were awarded had under-estimated the problems of logistics and expense arising locally, associated principally with the supply of materials and labour. A number of the large Malaysian/Singapore contractors who, when the current development programme was in progress, displayed interest and made tentative investigations into local prospects, decided ultimately to abstain from further participation. A particular problem arises in the execution of smaller civil engineering works, often of an urgent nature, and offering inadequate rewards to attract a better equipped contractor. The smaller firms to whom such work is normally awarded are frankly unsuitably equipped in either labour, plant, or knowledge, and progress is frequently disappointing.

Many of the smaller firms have not mastered the problem of pricing their tenders; and extraordinarily large variations between individual items and tenders frequently appeared, while arithmetical errors which should be obvious to an experienced eye, are a very common occurrence. Undue optimism over completion periods frequently arose.

During the year, 89 contractors were let, the largest being for a sum of \$680,000 for quarters at Berakas Camp. The number of registered contractors at the end of 1971 was as follows:—

Class A (Unlimited)	—	124	(122 in 1970)
Class AX (Up to \$500,000)	—	25	(20 in 1970)
Class B (Up to \$150,000)	—	84	(80 in 1970)
Class C (Up to \$25,000)	—	158	(151 in 1970)
Small Contractors (Up to \$3,000)	—	260	(259 in 1970)
Total	—	651	(632 in 1970)

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Small Contractors (Up to \$3,000)	—	260	(259 in 1970)
Total	—	651	(632 in 1970)

WORKS, UTILITIES AND SUPPLIES

Materials

Brunei continues to be almost wholly dependent upon imported manufactured materials for the class of work of interest to this Department. The position regarding supply from the Country's own resources remains unchanged from earlier years, although the prospect of supplies of good quality sandstone cobbles from the Temburong area for use in Government projects generally becomes firmer as the construction of pavements in the Temburong Road Project and the International Airport, for which this material is at present reserved, advances towards completion.

Otherwise, apart from bakau piles, bricks, beach sand, sandstone cobbles of a lower quality than those from Temburong, soft woods, and secondary hard-woods, development was wholly dependent upon imported materials and manufactured articles. In this respect some 40,000 tons of crushed granite were imported from Singapore for high quality road surfacing work, while a much smaller quantity of carefully selected granite from Hong Kong was used in high grade concrete work in water retaining structures constructed by Consulting Engineers.

Buildings

The Department is responsible for the maintenance of all Government buildings, apart from a few purely institutional premises of simple type, and with a few exceptions for all new building projects up to an individual value of about \$500,000. Above that figure, schemes are generally assigned to firms of Architects by the Commissioner of Development. Expenditure on maintenance of buildings was \$2.3 million and on new building projects \$5.7 million.

The largest Government housing scheme in the current development programme, with \$15,000,000 provided, for quarters in Bandar Seri Begawan, has now been completed with occupation of the final block of six units Senior Officers Flats at Jalan Malabau Bahru. Although a few individual building sites remain in the Jalan Berakas and Jalan Malabau Bahru areas any future housing development project will involve the location of a new site.

Similar housing projects have been completed in Kuala Belait while at Tutong the final phase of the local scheme is at present in progress.

The construction of rural Malay schools, to which a considerable amount of Departmental effort was directed in earlier years, came to a standstill pending directions from Government on the type of buildings to be adopted for these projects.

WORKS, UTILITIES AND SUPPLIES

Berakas Camp

As in previous years development work at the Camp entailed the provision of a separate construction group under a Civil Engineer. Apart from buildings and their services, the problems of erosion and soil conservation demanded constant and knowledgeable attention, and work on drainage, contouring grassing and tree planting continued without interruption; in this relation the contribution by the Conservator of Forests in providing many thousands of seedling trees is gratefully acknowledged. It is believed that the most serious erosion problems have been dealt with and although progress may appear to be slow, the Camp now bears little relation to the alarming conditions which prevailed a few years ago. A small Departmental labour force, with earth-moving plant, is maintained on conservation work and site preparation, with major works let out to contract on plans prepared by the Department. The contracts which were handled included:—

(a)	44 units Married MOR Barracks	\$741,000 (Completed)
(b)	5 units Senior Officers Quarters	514,000 (Completed)
(c)	1 block NCO Flats	131,000 (Completed)
(d)	4 units Class "G" Quarters	129,000 (Completed)
(e)	Telephone Exchange Building	26,000 (Completed)
(f)	Hygiene Store and Office	35,000 (Completed)
(g)	Drainage works	281,000 (Completed)
(h)	6 blocks Single men Barracks	680,000 (In progress)
(i)	4 units Class "G" Quarters	120,000 (In progress)

Also completed was construction of the sub-structure for the R.B.M.R. aircraft hangar at Bandar Seri Begawan Airport, costing approximately \$70,000.

WORKS, UTILITIES AND SUPPLIES

Education-Buildings

A wide range of minor and miscellaneous works were carried out for the Education Department but the only major projects in progress were a few brought forward from 1970 or earlier:—

- | | | |
|-----|--|-----------------------|
| (a) | Malay School & Quarters, Danau | \$160,000 (completed) |
| (b) | 24 units Teachers' Flats, Seria | 442,000 (completed) |
| (c) | Malay School & Qtrs., Bukit Panggal | 180,000 (completed) |
| (d) | Malay School & Qtrs., Bengkurong | 221,000 (completed) |
| (e) | Malay School, Pulau Baru-Baru, Dewan, etc. | 64,000 (completed) |
| (f) | Malay School, Lumapas (contract determined on death of contractor) | 295,000 (in progress) |
| (g) | Temporary Classrooms, Anthony Abell College, Seria | 23,000 (in progress) |

Police-Buildings

Projects included in the 1971 Works Programme were:—

- | | | |
|-----|--|-----------------------|
| (a) | Barracks, Quarters and Ancillaries, Seria | \$180,000 (completed) |
| (b) | Dewan, Renovation of Police Station, etc, Seria | 139,000 (in progress) |
| (c) | Dewan and Ancillary Works, Kuala Belait Police Station | 67,000 (in progress) |
| (d) | Police Station, Barracks, etc. Sungai Liang | 200,000 (completed) |
| (e) | Class "B" & "E" Quarters, Gadong | 309,000 (in progress) |
| (f) | Police Station, Barracks, etc. Tutong | 347,000 (in progress) |
| (g) | Police Station, Barracks, etc. Muara | 475,000 (in progress) |
| (h) | Accommodation for Special Escort Section, Istana Daru Hana | 170,000 (completed) |
| (i) | M.R.U. Panaga, Preparation of Site | 196,000 (completed) |
| (j) | Police Posts at Puni, Puala Baru-Baru, Kampong Amo, Kampong Limau Manis, Kampong Lumapas and Batu Apoi were completed at a cost of about \$22,000 each. An assortment of minor buildings and other works were undertaken at Police Headquarters, Gadong. | |

WORKS, UTILITIES AND SUPPLIES

Miscellaneous Works and Buildings

The year's work included a large number of buildings and services in the region of \$10,000 to \$20,000, too many to mention individually, in addition to numerous alterations and additions to existing buildings. The larger projects which were undertaken were:—

(a)	Surgical Ward, General Hospital, Bandar Seri Begawan	\$110,000 (completed)
(b)	T.B. Centre, General Hospital, Bandar Seri Begawan	130,000 (completed)
(c)	6 units Senior Officers' Flat, Bandar Seri Begawan	400,000 (completed)
(d)	Agriculture Dept. Stores, Kilanas	26,000 (completed)
(e)	Class "E" & "F" Quarters and Barracks, Tutong	268,000 (in progress)
(f)	Immigration Post, Puni	23,000 (in progress)
(g)	Class "G" Quarters, Agriculture Department, Puni	33,000 (in progress)
(h)	Telephone Exchange, Kg. Manggis	27,000 (in progress)
(i)	Concrete Drains, Tutong	29,000 (in progress)
(j)	Concrete Drains, Kuala Belait	82,000 (in progress)
(k)	Barracks for Forestry Department, Andulau	42,000 (in progress)
(l)	Staff Barracks, Istana Daru Hana	404,000 (in progress)
(m)	Staff Barracks, Istana Edinburgh	55,000 (completed)
(n)	Re-roofing, Istana Edinburgh	100,000 (completed)

Land Reclamation and Drainage, Kuala Belait

Erosion of the beaches between Kuala Belait and Seria has become a matter of some concern and extraction of sand was confined to the months between May and September, during which accretion normally takes place. Although no records are held by this Department the activity on the beaches indicated that very much larger quantities of sand were being removed for private development than were taken for Government purposes. During the year only 20,000 cubic yards of sand were used for swamp filling of Government land for use on prospective building and road locations, and for the very much larger quantity of 70,000 cubic yards required for the M.R.U. site at Panaga, sources of material had to be found in the Sungai Anduan and Sungai Tali regions.

WORKS, UTILITIES AND SUPPLIES

Concurrently with the development of areas of swamp around Kuala Belait into building sites the necessity for drainage continued with concentration on major outfall drains into which the laterals from Government and private properties could be led. During 1971 a length of 1,900 feet of reinforced concrete outfall drain was completed along Jalan Setia Di-Raja at a cost of \$135,000.

Water Supply

General

Rainfall for the year at 107.61 inches followed the normal pattern against an annual average of 113 inches, although there was a marked concentration of 65.7 inches into the second half of the year, the heaviest monthly rainfall of 18.05 inches occurring in December. There was no complete failure of any of the various supplies and the rise and fall in Tasek Reservoir followed normal lines.

None of the public supplies however proved to be adequate as in all cases demand was in excess of production, and rationing with attendant difficulties and expense was in operation throughout the State. The operations involved in the control of water by rationing to specific hours have a marked effect upon the quality of the product reaching consumers, as repeated interruptions in supply resulted in sediment and discoloration from the mains and service reservoirs appearing more frequently than under normal circumstances.

Building development in both the private and Government sectors continued to result in heavy increases in demand, which could at the best only be partially met at the expense of the quantity supplied to other consumers.

In Bandar Seri Begawan 450 additional connections were made raising the total to 4,846, while in Kuala Belait and Seria the corresponding figures were 104 and 2,678 respectively.

Despite the absence of extreme drought the demand upon water supply by road tankers increased sharply as housing development continued along public roads and beyond limits of normal reticulation, and requirements could at the best only be partially met.

Demands upon the Water Branch for repairs to water mains damaged in the course of pipe laying for the new sewerage and water supply projects in the hands of Consulting Engineers and contractors continued to be heavy.

WORKS, UTILITIES AND SUPPLIES

The new Sungai Tutong Water Supply Scheme undertaken by Consulting Engineers continued to make obvious progress. Towards the end of the year however the rate of work declined and some anxiety was experienced regarding the Contractor's ability to maintain his operations. A number of large development projects of National importance, principally the new Airport at Berakas and the Deep Water Port at Muara, are dependent upon a supply of water from this project and its expeditious completion is a matter of the highest importance. In the meantime, work is proceeding on the reticulation to distribute water from the new Sungai Tutong Scheme into both urban and rural areas. In the latter it will permit the closure of a number of small improvised untreated supplies operated by both the P.W.D. and District Offices, which are unreliable in output and a potential health menace.

The new Sungai Belait Water Supply, intended to provide adequate quantities for Kuala Belait, Seria and the coastal area up to Sungai Liang, is progressing somewhat slowly with the pipe-laying contractor encountering difficulties over the supply of his requirements. This new project is planned to provide an initial quantity of three million gallons per day from a source at Kampong Badas with treatment works at Seria, and with potential to provide six million gallons per day when demand arises.

Bandar Seri Begawan Water Supply

The average daily output over the year rose slightly to 2.4 million gallons per day against 2.23 million in 1970, with a maximum of 2.92 m.g.d. Throughout the year rationing was maintained at a nominal seven hours daily in urban areas with some relaxation as reservoir levels rose and a certain amount of additional restriction as they fell. In the more remote areas covered by the supply it was however possible to provide water only on alternate days.

The temporary pumped supply from Sungai Kianggeh into Tasek Reservoir was kept in operation until the latter part of the year during which time it provides a welcome addition of about 0.5 million gallons per day. In mid-year the permanent Supplementary Pumping Scheme from Sungai Kianggeh was completed and provides a further additional supply of approximately one million gallons daily, with a potential of two million gallons daily.

Generally, the quality of output was good both in purity and clarity with occasional marked deterioration, particularly in the latter, owing to rationing operations and mains breakages caused by contractors excavating trenches for new services.

WORKS, UTILITIES AND SUPPLIES

Kuala Belait Supply

This supply is obtained in bulk from the Shell Company installation at Seria, and the limiting factor is the quantity which can be made available from that source, nominally 800,000 gallons daily. The water passes through the Shell purification plant and receives further chemical treatment before distribution from the P.W.D. pumping and storage installation.

As in Bandar Seri Begawan the commissioning of a number of large development projects, principally educational, and increased public demand, resulted in progressively more severe rationing. At the close of year the New Hospital and the Town Sewerage Scheme had not been commissioned but demands from these in 1972 appear to be inevitable and a hiatus between these demands arising and the completion of the new water supply can be expected.

Other Supplies

Tutong's dependence upon a very small impounding reservoir makes the supply unusually susceptible to weather conditions, while demands are increasing substantially from a number of large school projects, with the requirements of a district hospital becoming imminent. The supply problem will inevitably continue until completion of the Sungai Tutong Project and in the meantime all that could be done was to slightly raise the level of the reservoir by temporary stoplogs and to install a small auxiliary pumping plant to make use of ground water from seepages.

At Labi the construction of a treatment works with storage reservoir and mains was completed by Consulting Engineers, but failed to commence operations owing to breakdown of the deep well pumps, forming the source of the supply, which were installed several years ago and which were found to require complete replacement.

Authority was received from Government to appoint a firm of Consulting Engineers to design and construct a small supply for Bangar Town costing approximately \$1,000,000. Until this installation is commissioned there would appear to be possibilities of taking over, for public purposes, the temporary pumping and treatment plant provided by the Contractors for the Temburong Roads Project for their own premises. The present public supply is completely inadequate both in quality and quantity.

WORKS, UTILITIES AND SUPPLIES

Gas Supply — Kuala Belait/Seria

This commodity, which like water, is obtained in bulk from Shell Company and distributed through public mains shewed few developments during the year. Unlike water there is no shortage.

Consumption increased from 1,442,000 cubic feet per day to 1,570,000 with the addition of 71 new connections, raising the number of the latter to 2,531.

Road Projects

On 31st December 1971, the mileage of roads in Brunei maintained by the Public Works Department was as follows:—

Bituminous surface roads	—	230.71 miles
Water bound roads	—	17.05 miles
Earth and sand roads	—	39.14 miles
Total	—	286.90 miles

The equivalent total in 1970 was 280.63 miles.

These roads with the exception of the third class are of all-weather motorable category and are considered to be of a relatively high standard in relation to the volume of traffic carried, although none of them represent modern motorway construction. There are, in addition, in the State, many miles of dry-weather motorable bridle-paths maintained by District Offices with occasional assistance given by the P.W.D. in bridge construction and earth-moving work.

Towards the end of the year work was commenced on the rehabilitation of roads in Bandar Seri Begawan which had suffered severely from damage caused by sewer, and other service, trenches, the nature of the subsoil causing the damage to be more wide-spread than normally associated with such work. Outside the town limits the construction of large diameter water mains along side tables also necessitated extensive pavement reinstatement work.

A programme of re-surfacing the Bandar Seri Begawan/Kuala Belait trunk road was commenced and some four miles were completed. The existing pavement is anything up to 15 years old and has performed creditably over that period showing a few signs of wear and tear until in recent years the density of traffic increased substantially.

WORKS, UTILITIES AND SUPPLIES

In addition to pavement deficiencies arising through this increased traffic it is also evident that attention will in the near future have to be given to improvements to roadside drainage, kerbs and foot paths. The absence of any suitable materials for providing inexpensive hard shoulders is resulting in extensive damage to grassed side tables, while heavy vehicles commonly park upon such verges as do exist and the substantial deterioration of their surfaces results in absence of space for pedestrians with the risk of accidents becoming increasingly greater.

A major section of the Temburong Roads Project, which totals some 40 miles, was completed by Consulting Engineers and Contractors working under the direction of the Commissioner of Development, and its hand-over to this Department for maintenance was commenced. Wherever possible local labourers formerly engaged upon the upkeep of the District Office's bridle-paths, and now redundant, were engaged for this work.

Nearly all the road projects in the hands of the P.W.D. were nearing completion with the volume of pavement and surfacing work becoming increasingly greater, while requirements for earth-moving were reduced to small proportions. The progress of individual projects has been:—

- (a) **Jalan Kota Batu — \$4,800,000 — 11½ miles** — With the construction of some four miles of stone pavement and hot-mix surface this project was completed, apart from fairly extensive requirements for drainage, side tables and turfing.
- (b) **Jalan Lumapas — \$1,665,500 — 5½ miles** — was completed and operated on a maintenance basis.
- (c) **Jalan Lamunin — \$3,000,000 — 10 miles** — The stone base course of the pavement has been laid throughout and hot-mix surfacing taken up to 8th mile, the final section being left incomplete to avoid heavy wear and tear from construction traffic engaged on other projects. This particular road has suffered extensively from damage caused by pipe-laying in the verges, much of which was however unavoidable.
- (d) **Muara Port Roads — \$1,639,000 — 3½ miles** — Completed, apart from side tables, turfing, and a certain amount of drainage.

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- (e) **Jalan Subok — \$685,000 — 2 miles** — Unfavourable weather conditions early in the year retarded progress on this road, particularly as a reasonable access had to be provided for local village traffic while construction was in progress. However $1\frac{1}{2}$ miles of formation have been built and pavement is in progress up to $1\frac{1}{4}$ miles.
- (f) **Widening Jalan Kumbang Pasang — \$49,000** — This project which provides 1,000 yards of 48 feet wide pavement from the present Airport junction towards Bandar Seri Begawan was completed apart from incidental work.
- (g) **Jalan Layong — \$1,750,000 — 3.85 miles** — Under unfavourable weather conditions which resulted in much of the working site being under flood water, work on this project was commenced in March as a matter of urgency to provide access from Lamunin to the Kampong Layong headworks of the new Sungai Tutong Water Supply Project. The road had initially been part of a complex assigned to Consulting Engineers, held in abeyance pending completion of land acquisition.

Progress was good, with three miles of formation constructed and one mile provided with water bound surface, until continuous wet weather set in towards the end of the year and working conditions became impracticable.

Kuala Belait/Seria Road

Work on the pavement continued throughout the year with $2\frac{1}{4}$ miles in progress. The road when completed will provide an alternative link between Seria and the commercial zone of Kuala Belait, relieving traffic on the existing road which follows residential areas.

Anduki/Kuala Belait Road — \$1,500,000 — 14 miles

The up-grading of this road (which was a few years ago taken over from Shell Company) by widening, kerbing and surfacing was completed, apart from one mile in Kuala Belait Town where sewerage operations have necessitated work being kept in abeyance; widening of this final section is now in progress.

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Sungai Liang/Labi Road — \$12,952,984 — 29 miles

Work carried out throughout the year consisted of five miles of formation between Bukit Puan and Labi on which three miles of soil/cement stabilised base course and one mile of hot-mix surfacing were laid. In addition, extensive work by contract on grass planting as a measure against erosion on the shoulders, banks and cuttings was in progress. Like a number of other road projects work on these has been completed by the necessity to make provision for traffic through the construction areas, and by the acceptance of traffic, including heavy timber haulage, over partially completed formations.

Miscellaneous Road Works

Projects undertaken during the year included:—

- (a) **Simpang Muara Resettlement Roads**
One mile of roadway was widened and surfaced and provided with hot-mix surface.
- (b) **Jalan Kampong Klanggeh — 0.82 mile**
All earth works and drainage works were completed and construction of a stone base course was well in hand.
- (c) **Jalan Residency**
1.05 miles were widened to 20 feet and re-surfaced as a matter of urgency in view of its potential use as a ceremonial route.
- (d) **Approach Road to Berakas Swimming Pool —**
completed.
- (e) **Detours for roundabout at New Airport Access Road —**
completed.
- (f) An assortment of access roads to navigational aid stations and earth-moving works connected with the new Airport project were completed.

Air Field

The Department maintains a small gang at the Brunei Airport with duties including the up-keep of drains and surrounds, and the approaches to the flight strip, in addition to patching of the runway and the renewal of runway markings. Towards the end of the year necessity arose for major patching adjacent to culverts crossing the runway, where substantial subsidence had taken place, but owing to the advent of completely unsuitable weather conditions combined with necessity to confine operations to hours of darkness where the runway was out of commission, only partial remedial measures could be applied.

WORKS, UTILITIES AND SUPPLIES

Road onstruction — Materials

Investigations continued into sources of base course material to replace the Berakas stone/sand matrix, used extensively and effectively in earlier years, the deposits of which are now exhausted. The use of stabilised soil, with cement as the stabilising medium, has been widely proven in Brunei, but is by no means inexpensive nor are suitable soils always readily available. In addition, the mix-in-place technique adopted locally raises limitations on the thickness of base which can be provided. Imported quarried and crushed rock is prohibitively expensive, but large scale use has been made of local materials, both in the form of sandstone cobbles blended with finer materials and the same cobbles after crushing. Extensive sections of roadway constructed by these methods are being kept under observation.

With a number of road projects simultaneously reaching base course stage the demand for stone rose sharply and 83,000 tons of locally produced cobbles were used against 54,000 tons in 1970, with the cost dropping from \$15.00 per ton to \$9.85 per ton. The use of imported granite chippings for high quality hot-mix surfacing continued and during the year a total of 38,000 tons were used against 20,000 tons in 1970, the price remaining constant at about \$26.00 per ton, c.i.f.

Berakas Depot

In addition to the stone crushing and hot-mix installation at the Depot an emulsified bitumen plant is operated, as well as a plant for production of reinforced concrete spun pipes up to 42 inches in diameter. The output from the Depot during the year was:—

Hot bitumen — 1,200 gallons (16,700 in 1970)

Emulsified bitumen — 32,750 gallons (28,500 in 1970)

Hot-mix — 40,900 tons (21,000 in 1970)

R.C. pipes — 4,000 lineal feet (4,600 in 1970)

Precast concrete products — 1,200 cubic feet (800 in 1970)

The arrangement with Shell Company for the supply of heated bitumen in bulk by road tankers from their depot at Muara simplified operation of the hot-mix plant, the cost of the material in addition being slightly below that for bitumen supplied in drums as formerly.

WORKS, UTILITIES AND SUPPLIES

Workshops

The Public Works Department operates major workshops at Bandar Seri Begawan and Kuala Belait fully equipped with machines and tools to undertake all classes of vehicles and plant repair and overhaul in addition to service depots for field maintenance of plant, at Berakas Camp, Temburong and Bukit Puan. The number of men employed in these workshops totalled 474 in Bandar Seri Begawan and 160 in Kuala Belait.

Although a few other departments have service depots for the upkeep of their mechanical plant (mainly transport), the P.W.D. workshops provide repair facilities for all Government holdings, in addition to routine servicing facilities for the majority of Government vehicles.

With the increasing interest taken by local business firms in haulage, earth-moving, and light mechanical repair works, it has become departmental policy to confine P.W.D. workshop facilities and plant purely to Government requirements and not to intrude into the private or commercial sector.

Until recently, construction plant unavoidably left unprotected in remote areas after dark has been immune from vandalism and pilfering experienced in other countries, but in recent months repeated instances have arisen of the thefts of easily removed components from these parked machines. Similar thefts have taken place in urban areas and so far the culprits have not been apprehended.

The two landing craft owned and operated by this Department have been on regular charter to Askar Melayu for the transport of troops and materials between Bandar Seri Begawan and Temburong, whilst similar services to Labuan have been provided for the local Gurkha Battalion. The vessels have also continued to make a useful contribution to the development effort of the country in handling heavy units of contractors' plant between Brunei/Labuan/Temburong. The revenue earned by these vessels during the year was \$80,000.

The repair works carried out during the year compared with those in 1970 consisted of:—

	1971	1970
Major repair	86	26
Minor repair	3,883	3,136
Other works	3,414	3,413
No. of vehicles serviced	2,151	3,366

WORKS, UTILITIES AND SUPPLIES

Difficulty in obtaining spare parts from local stocks of distributors of vehicles and plant is still encountered and increased resort was made to the supply of light items by airfreight from Singapore and Malaysia; the additional cost of this freight has been justified in avoiding extensive down-time of equipment under repair.

The rate of disposal of unserviceable plant and vehicles continued to be unsatisfactory with additional numbers accumulating at Berakas Depot where, unavoidably exposed to weather and petty pilfering, their value depreciated over the months or years lapsing between their withdrawal from service and actual offer for sale.

Plant and vehicles purchased and received during the year included:—

Heavy equipment	—	7 units
Light vehicles	—	5 units
Total	—	12 units

Plant and vehicles surveyed for write-off during the year were:—

Earth moving & road making plant	—	5 units
Heavy vehicles	—	22 units
Light vehicles	—	9 units
Total	—	36 units

Departmental holdings at the end of the year were:—

	1971	1970
Earth moving and road making plant	— 210 units	212 units
Heavy vehicles	— 230 units	248 units
Light vehicles	— 85 units	89 units

There are no training facilities for workshop employees within the Department but a number of men sent to training establishments elsewhere: these being:—

Two students to Government Engineering Trade School (Automobile Mechanical Section) Kuala Belait.

Six students to Marine Navigation School, Labuan, for master, mate, and engine driver certificates.

WORKS, UTILITIES AND SUPPLIES

(b) Survey

General

During the year under review the Department was kept fully employed in all sections, giving service to other Government departments, Government consultants and the general public.

A bulk store was constructed to enable bulk stocks of maps to be kept in Brunei. This store was very necessary because of the withdrawal of the Army Survey Depot from Singapore, where in the past bulk stocks were readily available.

A map exchange agreement was made between the Surveyor General and the Director of Military Survey U.K. This agreement enables the Department to obtain certain map series on a "free of charge" exchange basis.

Aerial photography was taken of selected areas of new development in the State which included the Muara Port area where the effect of littoral drift of sand needs frequent study.

The Surveyor General, Dato N. C. Peat and the District Surveyor, Belait, Awang Mohd. Taib bin Haji Said attended the Commonwealth Survey Officers Conference held at Cambridge, England. The District Surveyor also attended the Commonwealth Military Survey Conference in London representing the interests of the Royal Brunei Malay Regiment. He also visited survey organisations and instrument manufactures both in England and Europe during a two months study tour.

Field Surveys

The Survey of land for sub-division, road acquisition and Government Reservations progressed steadily throughout the year.

Five new tertiary triangulation stations were established in Temburong District, providing addition control for new traverses in the area, which was necessary for the road development. Great assistance was given by the use of the Royal Brunei Malay Regiment's helicopter, which transported the survey parties and beacons to the selected sites.

Two units of the Wild DI-10 Distomat were purchased during the year and were in operation on control traverses. These electronic distancers proved a great success both in accuracy and speed of operation. A line of 1000 metres can be measured in about 25 seconds at an accuracy of 1 to 2 cm.

WORKS, UTILITIES AND SUPPLIES

Survey Drafting

The laborious task of drafting of survey plans continued on the Cassini projection, but it is intended to redraw all the master plans and new plans on the Rectified Skew Orthomorphic projection next year.

Progress was made on the compilation and drawing of the "Location of Services" plans of Bandar Seri Begawan area.

All the Wayleave Agreement Plans for the 66 K.V. Electrical Transmission line were completed.

A small inexpensive plan typewriter, which enables lettering to be made on drawings and plans on a flat surface, was purchased. This machine produces excellent lettering quickly and has reduced the drafting time in preparing plans considerably. It is intended to purchase several more of these machines next year.

Mapping

The revision of the T 735 Series, 1/50,000 Scale maps on the new specification continued and the Bandar Seri Begawan sheet was received in bulk supply from the printers. Unfortunately this sheet was not available for the general use for security reasons. Tutong sheet was completed and forwarded to the printers, and the Tasek Merimbun sheet partially completed.

Map extracts of all new editions are being prepared for the Education Department, and two extracts have been completed and sent for printing.

A new Street Map of Bandar Seri Begawan and environs was printed and on sale to the general public. A similar map of Kuala Belait and Seria was partially completed and will be printed early next year.

Messrs. Survey Services of Singapore were commissioned to supply maps of Brunei-Muara District at a 1/12,500 Scale. The maps are required for development planning of the area. Aerial photography was flown and ground control completed and the finished maps in six colours will arrive in Brunei early 1972. A further survey was carried out by Messrs. Survey Services for the Agricultural Department's Station at Birau at a large scale.

WORKS, UTILITIES AND SUPPLIES

Survey Computing

It was necessary for additional staff to be employed on survey computations. The output was excellent considering only hand operating calculating machines were available. The need for modern electronic calculators and desk top computers still remains and with the increase in surveys the urgent demand for new sub-division of land will be considerably delayed. It is hoped that modern calculators will be made available next year.

Photographic Printing

This section was fully employed throughout the year providing photographic prints for both Government departments and public alike. On the graphic arts side, the reproduction of negative and positive film materials for mapping was considerable.

The photo-lettering machine purchased in 1970 was in full use. Besides composing for mapping, name plates and labels were made for other Government departments, in particular the Fisheries Department who required hundreds of labels for the fish tanks at the Hassanal Bolkliah Aquarium.

Progress for Year 1971

Drafting Section	Jobs Approved	
	1970	1971
Sub-division	165	191
Land Applications	3	1
Gazette Plans	26	28
Certified Plans	135	144
Dyeline and Reflex Printing	16,611 ft.	23,076 ft.
Photostat Printing	12,162 ft.	15,544 ft.

Computer Section

Job approved	238	270
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Field Section

Land Applications	2	7
Sub-divisions	219	213
Government Reserves	36	26
Revision	30	56
Control	13	3
Road Acquisition	39	41
Miscellaneous jobs	33	25

Revenue through

	1970	1971
Sub-division of land	= \$45,555	\$56,973
Map and Printing Sales	= \$18,906	\$13,864

WORKS, UTILITIES AND SUPPLIES

(c) Electrical Supplies

The load continued to grow at a high rate, maximum demand increasing from 11.1 to 14.3 MW during the year and units generated from 5 M in January 1971 to 6.9 M in December, 1971, making a total of 70 M for the year compared with 56.3 M in 1970.

Development of the transmission system included completion of the 33,000 volt line to give a combined supply to L.N.G., B.S.P. and Government Pumping Stations at Badas. The conductor used for the section of 66,000 volt line from Seria to Sungai Liang was replaced by new conductor of twice the capacity to accommodate the standby load to L.N.G. Lumut, the original conductor being recovered and used for the Badas line. L.N.G. Lumut was connected to the Government system by a short spur to the main line.

The B.S.P. and Government Power Stations at Seria are now interconnected at 33kV to give greater flexibility of operation in the area and for mutual benefit in emergencies. The original B.S.P. line to Badas has been taken over by Government who now control the pumping supply for the three stations. The system is operated to give maximum security of supply using two lines and two power sources.

There was some delay in the fourth Gas Turbine Generator at Seria due to last minute doubts about the load bearing capacity of the bridges between Kuala Belait and Seria. The two heavy lifts of over 65 tons each were, therefore, diverted to the Procon jetty at Lumut and then re-embarked on a flat-top barge to be beached at Seria. The movement was completed very smoothly by Procon staff.

Various shortages of small items further delayed completion, but the set should be ready to increase the system capacity by 16 MW early in 1972.

Rural electrification continued during the year. A total of 14 villages and kampongs were electrified as against seven villages in the previous year.

Total units generated during the year by the Department's power station rose to a record 69,903,958 units as against 56,309,846 during the preceeding year, an increase of 24.1%.

WORKS, UTILITIES AND SUPPLIES

Extension of the 11kV distributors continued as required and includes a four mile length of open line to supply the Tutong River Water Supply Headworks at Layong and extensions to 14 kampongs by the successful aerial cable system now preferred for this service.

Generation

As No. 4 set was not commissioned by the end of the year as expected, the capacity of Seria Power Station remained 30.75 MW. There were no major troubles, but at a routine maintenance of No. 3 set, it was found that an area of localised vibration, which was present at commissioning and which had been passed as acceptable by the manufacturers, has in fact caused unacceptable deterioration of the machine. This machine is now held as emergency reserve until the manufacturer can determine what remedial action is to be taken.

At Gadong Power Station, No. 5 set was put out of commission by accident due to maloperation of starting equipment. It has been found more expensive to purchase spares to repair the Ruston diesel than to buy a new engine and it is thought better to delay replacement of this unit until a large unit may be required, possibly powered by another type of fuel. Installed capacity is now reduced to 11 MW, but this is adequate for the present and the station continues to function satisfactorily. Table A below gives the installed capacity of each station at the close of the year, the total units generated and/or purchased and the maximum load recorded at each station during the year under review as compared against the previous year.

Table A

Station	Installed		Units generated		Max. Demand	
	Capacity in KW		and/or Purchased		in KW	
	1970	1971	1970	1971	1970	1971
B. Seri Begawan	14,000	11,000	1,753,820	4,273,280	—	—
Seria	30,750	30,750	53,654,600	64,734,000	11,100	14,300
K. Belait & Seria	—	—	140,009	175,218	—	—
Temburong	860	860	761,417	721,460	200	200

Transmission Lines and Substations

At the close of the year the following works were completed:-

(a) 66kV Transmission Line

1. a new T-off double circuit line for the L.N.G. works at Lumut, a distance of approximately 1 mile.

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2. Restraining of the double circuit transmission line between Seria and Sungai Liang sub-stations replacing the ACSR conductors from 0.15 sq. inches in copper equivalent to 0.30 sq. inches copper equivalent.

(b) 33kV Transmission Line

1. a new line from Seria Power Station to Badas, a distance of approximately 7 miles.
2. A single circuit tie-in between the B.S.P. and Government 33kV networks, a distance of approximately $\frac{3}{4}$ mile.

(c) Sub-stations

1. a new 33kV sub-station at Badas.

In the course of erection and expected to be completed early in the coming year were one 33kV sub-station at Seria and one 66kV sub-station at Lumut for the L.N.G. plant.

A landslide endangering the terminal tower at the 66kV Tutong Road, Mile 18, sub-station necessitated the deviation of the 66kV double circuit line, using two towers to replace the one endangered.

Also due to a landsilde a tower on the 66kV Lamunin line was replaced by the erection of two new towers.

Distribution

Major works completed or in course of construction.

- (a) The Lamunin to Layong line to supply the headworks of the new water supply was almost completed. Construction is on steel poles using 0.15 sq. in. A.C.S.R. conductor recovered from Seria/Sungai Liang 66kV line.
- (b) An aerial cable was strung on steel poles from Rampayoh to Labi to give a supply to Labi water works and to the locality.
- (c) Aerial cable extensions to the existing system were made at Mile 13 and Mile 22 Tutong Road to supply Kampong Ketimahir and Kampong Luagan Dudok.
- (d) A line to supply Kampong Puni is in course of erection at Temburong.

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- (e) Other kampongs supplied in 1971 by aerial cable were Kampong Kulap and Kampong Dato Gandi.
- (f) The underground 11kV network in Kuala Belait was extended to include a 2,000 K.V.A. sub-station in the new Kuala Belait District Hospital.
- (g) Diviation of low tension lines was carried out on Jalan Muara and Jalan Tutong to make way for water plpe lines.

The following tables B, C and D give details of sub-stations erected and dismantled, underground cables laid and overhead lines erected and dismantled.

Table B — Sub-stations

District	Sub-stations Erected		Sub-stations Dismantled	
	No.	Type	No.	Type
		Total Capacity in K.V.A.		Total Capacity in K.V.A.
Brunei and	6	Standard	1	Standard
Muara	2	Pocket Units	—	—
	4	Outdoor	1	Outdoor
	8	Pole Mounted	—	—
K. Belait and	1	Outdoor	—	—
Seria	3	Pole Mounted	—	—
Tutong	2	Pole Mounted	—	—

* Existing transformer uprated to 300 K.V.A.

† One unit of 500 K.V.A. installed at the L.N.G. Project Camp Site.

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Table C — Underground and Aerial Cables

District	Underground Cable Laid in Metres		H.T. Aerial Cable Strung in Metres
	H.T.	L.T.	
Brunei & Muara	8,424	15,860	5,850
K. Belait & Seria	720	11,500	2,150
Tutong	346	4,346	2,200
Temburong	150	400	—

Table D — Overhead Lines

District	Conductor Used in Metres			
	Erected		Dismantled	
	H.T.	L.T.	H.T.	L.T.
Brunei & Muara	16,000	24,520	—	14,700
K. Belait & Seria	—	10,800	—	—
Tutong	—	3,080	—	—
Temburong	—	600	—	—

Consumers Section

During the year it was possible to reduce the number of meters to be read and the corresponding number of ledger entries, by grouping supplies. The concession of free electricity to Police and Army consumers has enabled bulk metering to be installed. The number of meters in Government Departments has been reduced by regrouping circuits in some cases. The number of new consumers is therefore not seen in the record of consumers on the books at the year end, which shows a decrease of 5,273 in the Brunei-Muara area.

Total sales of electricity amounted to 58,703,766 units. This is an increase of 10,669,434 or 22.2% over the year 1970 when total sales registered 48,034,332 units.

Table E below gives details of the units sold during the year under review as against the year 1970 and the number of consumers connected to the system as at 31st December, 1971, as against the number as at 31st December, 1970.

A system of charging deposits for consumers occupying rented quarters was introduced at the end of the year to simplify collection of accounts of outgoing tenants.

The Department maintained and kept in repair all installations in Government property, replacing the wiring where necessary when tests showed this to be due. New installation were all inspected and tested before being given a supply.

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A meter changing programme was put into effect so that calibrations may be checked regularly and condition of meters known.

Table E

District	Unit Sold		No. of Consumers as at 31st December	
	1970	1971	1970	1971
Brunei	36,663,403	39,705,599	12,807	7,089
K. Belait & Seria	8,922,426	15,857,346	2,566	2,751
Tutong	1,014,618	1,297,970	979	1,298
Temburong	517,738	505,399	207	233
Muara	916,147	1,337,452	228	240

Hire Purchase Scheme

The Department continued to operate the scheme throughout the year. A large number of applications for purchase of appliances under the scheme had to be held back due to lack of funds. It is hoped that the position will improve as more profits derived from the sale of appliances are accumulated along with the initial capital provided.

Details of the number of appliances sold under the scheme are given in the table below.

Table F

Appliances	Brunei including Tutong, Temburong and Muara		Kuala Belait and Seria	
	1970	1971	1970	1971
Refrigerators	358	583	230	309
Fans — Table, ceiling				
wall and floor stand	89	102	29	58
Washing machines	122	188	22	38
Cookers	121	96	1	—
Food Mixers	10	13	—	—
Air Conditioners	2	2	3	3
Vacuum Cleaners	—	1	—	—
Freezers	1	2	—	—
Electric Motor	—	1	—	—
Rice Cookers	5	4	—	3
Fry Pans	1	—	—	—
Sewing Machines	1	—	—	—
Ovens	8	10	—	—
Kettles	—	4	—	—
Blenders	—	2	—	—
Floor Polisher	—	1	—	—

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Air Conditioning Section

A total of 149 new window type air conditioning units of various sizes were installed in Government offices and buildings during the year as against 101 units in 1970. In addition, two air cooled central plants, one each at the new Museum and the Churchill Memorial complex, were installed and were functioning satisfactorily.

Regular servicing and maintenance of all air conditioning units were carried out by contractors under the supervision of the Department's Air Conditioning Engineer.

Street Lighting Section

Improvement of the street lighting system continued throughout the State though not at the same rate as in the preceeding year.

Sodium vapour street light fittings were tried out at some important road junctions in Bandar Seri Begawan and along one road in Tutong. More extensive use will be made of this type of road lighting in future due to its effectiveness and economy.

Details of street lights installed and commissioned during the year are as given in table below:—

District	No. of Lamps commissioned
Brunei and Muara	245
Kuala Belait and Seria	120
Tutong	31

Maintenance works and repairs were carried out and the whole street lighting system kept in good working order. Damage to traffic lights and lamp standars caused by accidents were dealt with promptly.

As in previous years, decorative illumination was provided at the Istana, Town Mosque, Government officers and Public buildings on all civil, ceremonial and religious occasions whenever the Department was called upon to do so.

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Stores

The organisation established at Gadong functioned smoothly and needs of the Department were covered by the normal indenting procedure and local purchase as required.

Staff

It has become increasingly difficult to recruit suitable staff and there are many vacancies in technical and supervisory grades. Some disappointments have been met in staff selected after interview, who have not signed contracts.

Existing staff have given good service and in many cases have had to extend themselves to cover the gaps.

The organization is close knit and carries out the whole range of electrical services in the State. Should there be any significant development in the number of consumers and the scale of operations it might not be possible to continue effectively to provide these services under present conditions.

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(d) State Stores and Supplies

The Department dealt with an ever increasing amount of business during the year under review. Both tonnage and value of stores showed a marked increase over the past years. More than 18,000 tons of materials made up of more than 296,000 packages were handled. The value of transactions totalled over \$19 million.

Purchases of stores amounted to \$9.5 and sales \$10 million. The value of stock holding at the end of the year was \$8 million.

Apart from the Motor Transport, Heavy Equipment and Plant Stores, General Engineering, Building Materials, Water Works Materials and Water Treatment Chemicals held by the department; Rice, Sugar, Milk were also carried as stockpile. These few items are given in greater details in the report.

Rice. This department continued to purchase rice from Thailand on a Government to Government Agreement. A new agreement was signed in March this year for the purchase of Class B 100% Thai White Rice which is also known commercially as grade "AAA" rice. The decision for the change over from the Class A rice which was bought during the past years to Class B rice was due to the rather significant price differential.

These two classes of rice belong to the same grade; only the composition of the sizes of grains differ. The gain through the lower purchase price paid for this class of rice was reflected in the retail selling price being reduced by an overall 30 cents per gantang during the year to \$2.20 in Bandar Seri Begawan.

8,500 tons rice with a total value of \$3,861,426 was bought and shipped on the m.v. "Cherry Bagus", a ship owned by The Soon Shipping & Tarding Co. Ltd. of Singapore. Seven sailings were made during the year. This firm has, however, decided to terminate its contract to carry rice for the Government because it did not find the Service between Bangkok and Brunei lucrative. The journeys were usually a one-way affair with sailings to Bangkok done on ballast. The contract will expire in March, 1972.

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Sales for the year amounted to 8,730 tons valued \$5,000,683. Stock held at the end of the year was 6,511 tons.

Sugar. A tender for the supply of 6,000 tons at \$451 per ton was accepted. Of this a quantity of 3,000 tons was delivered up to the end of the year. 4,000 tons from the previous year's tender were earlier delivered, thus making a total of 7,000 tons in all received for the year. The total value of purchase was \$3,166,209 and sales was \$2,387,800 for a quantity of 4,975 tons. Stock held at the end of the year was 3,324 tons.

Sugar was retailed at 34 cents per kati at Bandar Seri Begawan.

Milk. Both powder and sweetened condensed milk were held in stockpile. They were not sold directly to the market but the stock was rotated by exchanging for the fresh imports of the local agents. 43,568 cases milk were exchanged this way. However, due to the discovery that some of the sweetened condensed milk held in stockpile was deteriorating, the Government agreed and sold back to the Manufacturer 4,000 cases of this milk. A smaller stock is now carried for this item.

A small quantity of padi was also purchased from the Agricultural Department. 13,784 lbs. were bought and 5,494 lbs. were sold. Stock held at the end of the year was 89,600lbs. There was no padi being purchased from the local rice farmers.

The staffing position of the department improved considerably. Three storekeepers, Grade I, joined the Department during the year.

CHAPTER 12

A BRIEF HISTORY OF BRUNEI

Archeological works and the discovery of relics in Brunei and neighbouring Sarawak indicated that Brunei was an old established Malay State. This fact was supported by historical data, especially in reference to Chinese History, which showed that Brunei had a wide connection with her neighbours on the Asian continent around the sixth or seventh century A.D.

Chinese History dating 518, 523 and 616 A.D. related to the visits of envoys from Po-lo, Po-li, Pori, Ye-po-ti; a country of 45 sailing days from China. This coincided with the old location of Brunei.

Various names with many versions had been given to Brunei in the 19th century, Burni, Bourni, Bournee, Borney, Borne and Borneo were referred by the English before the 19th Century, and thereafter, it was commonly referred as Burne, Brunei, Bronei and Brunei. The Dutch on the other hand had given far-fetched names such as Berow, Barow, Barau, Beraw and the likes. Accordingly "Brunei" is perhaps a Sanskrit word meaning "Seaform". This presumption could be aptly accepted because the present proclamations of the titles in the Royal Court have shown Hindu influence brought about by Seri Wijaya.

Before the coming of Islam to this part of the world the history of Brunei was vaguely recorded and this made it difficult to determine ancient relics. The Majapahit Empire collapsed and in its place Malacca become the source of influence. It was around this time that Brunei became an Islamic State when Sultan Muhammad, the First Sultan of Brunei, embraced Islam on his marriage to a Princess of Johor.

The history of Brunei showed that Brunei played a major role in the propagation of Islam. In the 15th and 16th Centuries, Islam propagators from Brunei travelled to Celebes, Tidore and Ternate. This was also the beginning of Brunei expansion as a power in this region.

Following Brunei's territorial expansion, her relationship with Malacca and China was suspended and this remained so until Malacca fell to Portugese in 1511. Brunei maintained her power and her independence from foreign influence until the end of the 19th century.

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Brunei was made famous and powerful by two Sultans. The first was Sultan Bolkiah, the 5th Islamic Sultan of Brunei and the son of Sultan Sulaiman. The second was Sultan Hassan, the 10th Islamic Ruler who was also known as "Al-Marhom Di-Tanjong", and even up to the present time his tomb is still located at Tanjong Chendana at the mouth of Brunei River. It was said that during the reign of Sultan Bolkiah the power and influence of Brunei extended to as far north as the Philippines. Sultan Bolkiah was known for his travelling and whenever he went, he took along his Royal Orchestra. Thus he was widely known as the "Nakhoda Raqam". From the chronological history of the Sultans of Brunei, it was Sultan Bolkiah who conquered Seludong (Manila) and later married the daughter of Dato Gamban, ruler of the territory. For a period of time Seludong had to pay an annual tribute to Brunei.

Sultan Hassan was the architect for the Pulau Chermin Fortress and the bridge connecting Tanjong Chendana and Pulau Chermin. During his reign elephants were introduced to add to the colour and splendour of the Royal Court. The Court was to become the Royal hereditary customs of today. These customs were similar in many ways to those found in Aceh. Many visitors from the West who came to Brunei during Sultan Hassan's reign had found that Brunei was producing brass cannons of much superior quality than any of those made in the Malay World. Several of these cannons were later brought along by visitors to Europe.

It was Sultan Hassan who was regarded as the most famous and powerful of all Brunei Islamic rulers. Brunei's jurisdiction covered the whole island of Borneo and the surroundings north of it. Sulu Island had to pay tribute and close family ties resulted between Brunei and Sulu. He married Princess Betara of Sulok and one of their sons, Pengiran Shahbandar Maharaja Laila was later to ascend as the ruler of Sulok Islands.

The influence of Brunei continued until the coming of the Europeans. Ludrico de Vartane, an Italian, was among the earliest visitors to Brunei in the years between 1505 and 1507 A.D. In 1516 Barbose, a Spaniard, visited Brunei and he was later followed by Anthony Pigafetta in 1521. The later accounted that:

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"That city is entirely built in the salt water, the King's house and those of some of the Chieftains excepted. It contains 25,000 fires of families. The houses are all of wood, and stand on strong piles to keep them high from the ground. When the flood tides make, the women in boats, go through the city selling necessities. In front of the King's palace there is a rampart constructed of large bricks, with barbicans in the manner of a fortress, on which are mounted fifty-six brass and six long cannons. During the two days we passed in the city many of them were discharged. The King is a Moro (a) and his name Raja Siripada (b) he is forty years old and corpulent. No one serves him except women who are the daughters of chiefs. He never goes outside his palace, unless when he goes hunting, and no one is allowed to talk to him except through the speaking tube. He has scribes, called xiricoles (c) who wrote down his deed on very thin tree bark.

"On the 29th July, being Monday, we saw coming toward us more than a hundred praus, divided into three squadrons, and with them an equal number of Tungulis(?), which are their smallest barks. Seeing this and apprehensive of treasons, we anxiously make sail and in our haste left an anchor in the ground. Our suspicion increased when we observed that behind us, there are certain junchi (junks) which have come here the day before. Our first business was to disengage ourselves from the junks, and we open fire on them capturing four and killing many persons. Three or four junks run aground to save themselves. In one of those which we took we found the son of the King of the island of Loson (Luson), who was the captain-general of the King of Brunei, and who had come with the junks from the conquest of the great city of Laoe, situated at the end of that island opposite to Java Maggoire (probably some place in Banjar masin). He had made the expedition and snacked the city, because the inhabitants wishes to obey the King of Java in preference to the Moorish King of Brunei. The Moorish King having heard of our bad treatment of his junks, made haste to inform us through one of our people who was ashore trading, that the praus were no means intended to do us harm, but to make war on the gentiles, in proof of which they showed us some heads of those whom they had killed."

Some suggest the Pigafett's account is perhaps too much an exaggeration. Nevertheless, it is believed that at the beginning of the 16th century Brunei was a powerful kingdom and that during Pigafetta's visit, Brunei was under the rule of Sultan Abdul Kahar who was said to be about 40 years of age about the time of Pigafetta's visit.

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From 1530, European visitors to this part of the world kept on trying with great effort to hold power in Brunei in view of her being the centre of power in the Malay world. In 1577 A.D. the Spaniards, who were the occupying Philippines, paid a visit to Brunei with the intention of seeking permission to trade and to propagate Christianity. They also requested the Sultan of Brunei to forbid Bruneians from propagating Islam in the Philippines. Their request met negative response from the Sultan Saiful Rijal and in anger the Spaniards attacked Brunei early the following year with the help of two traitors, Pengiran Seri Lela and Pengiran Seri Ratna. In August 1578 the Spaniards occupied Brunei and the seat of Government was transferred to Ulu Mergang. The leadership was taken over by the Sultan's brother, Pengiran Bendahara Sakam who drove the Spaniards from Brunei. The Spaniards, however, renewed their attack in 1645 and was repulsed. Both the Portuguese and the Spaniards failed to secure any territory in Brunei.

Towards the later part of the 16th Century, the English and Dutch began to exert influence in southern Borneo and finally southern and eastern Borneo fell to the Dutch.

The British influence began in 1609, but it was not until 1701 that a trading post was set up in Bandjarmasin. In spite of this the British failed to gain power in Southern Borneo until the middle of the 18th Century.

In 1762 Sultan Aliuddin of Sulok, ceded Balambangan to the British, but in 1774 British activities there were temporarily suspended as their attention was diverted to the Malay Peninsula.

In the 19th Century, Borneo was turned into a field for power struggle among the British, Dutch, Portuguese and the American. Notable among the British were Brooke in Sarawak, Baron de Overbeck and Alfred Dent in Sabah. Brooke named himself "Rajah of Sarawak" and he remained in power by virtue of the 1841 Agreement with Brunei. Baron de Overbeck got himself the title of Maharaja of Sabah apart from being Raja of Java and Sandakan. The Dutch were successful in the southern part of Borneo, and by 1904, Brunei became a tiny country sandwiched between Sarawak and Sabah.

A Treaty was signed between Brunei and the British in 1847 for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra territorial jurisdiction over British subjects in Brunei. Provisions in this Agreement were modified in 1856 to clarify jurisdictions over British subjects for crimes committed in Brunei.

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In 1872, the Sultan of Sulok handed over all trading matters in Sabah to William Cowie, but conflict between the western powers led Alfred Dent to gain control and to establish the North Borneo Company in 1882. In 1888 North Borneo became a British protectorate and Brunei became a British protected State.

In 1906 Brunei accepted the First British Resident, a representative of the British Government, who was to advise on all matters except those concerning customs and religion.

Between 1906 and 1941 a new form of Government emerged to include a State Council. Oil was discovered in Seria and went into commercial production in 1929, but it was not actively developed because of economic recession in England and many parts of the world. Production was further interrupted by the war and did not fully resume until after the war.

During the second World War, the Japanese occupied Brunei for 3½ years.

After the war, the social and economic development of Brunei slowly returned to normal. However, dynamic progress was witnessed in the seventeen years Sultan Sir Omar Ali Saifuddin, the 28th Sultan of Brunei was on the throne. Under his initiative and leadership, Brunei progressed into the modern world in the economic, social and political fields.

Emphasis was laid on an extensive infrastructure for the State. Secondary schools were built in the towns and a network of Primary schools for the rural areas. A trunk road and branch roads were completed and social services were improved. A new form of Government materialized from the Brunei Constitution of 1959.

It was unfortunate that this aspired progress was marred and interrupted briefly by an irresponsible albeit abortive rebellion in December, 1962. Because of its lack of popularity, the rebellion was swiftly suppressed and it was not long before the State regained its normal pace of progress.

At the beginning of 1966 Brunei decided to introduce its own currency at the same time as Malaysia and Singapore in place of the Straits Dollar, which had previously been the common currency in all three States.

On 4th October, 1967 the Sultan of Brunei, His Highness Sir Omar Ali Saifuddin, after seventeen years of benevolent and progressive rule, on his own free will, abdicated and was succeeded by his son, the then Crown Prince. Under the Brunei tradition, the former His Highness became Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda Omar Ali Saifuddin.

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The new Sultan, the 29th of his line, took the name of His Highness Sultan Hassanal Bolkiah Mu'izzaddin Waddaulah. On the accession to the Throne, His Highness pledged to continue to work for the peace and prosperity of his subjects and the country, pioneered by his father, the former Sultan.

His Highness's Coronation took place in the new magnificent Lapau on August 1, 1968 and was attended by many foreign dignitaries.

Under His Highness's helmsmanship Brunei is devoting a share of its very considerable oil revenue to building up its economic and social infrastructure. The construction of the international airport (whose 12,500 foot runway will make it the largest in the Far East), the deep water port, the sewerage system, among others, are progressing rapidly to cater for the needs of a developing State. The first oil strike by Shell on its 1,470 square mile concession 22 miles off the Brunei coast will stimulate activity in more remote areas such as the Temburong District.

Prolonged negotiations on Brunei's constitutional future and on its relationship to the United Kingdom took place in London during September and October, 1968. The talks were attended, among others, by the new Sultan, his younger brother and his father, the former Sultan. Agreement in principle has been reached in 1970 over Britain's defence commitment to Brunei. On 23rd November, 1971, the Agreement was amended. In this amended Agreement Her Majesty continues to be responsible for the External Affairs of the State and that, subject to consultation, provision for the defence and security of the State should be a task to be shared between Her Majesty and His Highness, and that the State enjoys full internal self-government.

In 1970 Brunei has resurrected its rightful claim to the Limbang District, an area of approximately 1,000 square miles, which has grabbed by the Second Rajah in 1890, and now forms part of Sarawak's Fifth Division. The claim was made through proper channels seven years ago at the time Brunei refused to join Malaysia and this is the first time the claim has been made public. The public announcement was made by the Seri Begawan Sultan on September 29, 1970 and said "Brunei and Limbang are not separated because Limbang belongs to Brunei." he urged to topographers not to draw boundaries between Brunei and Limbang as the two were in one and the same territory.

On October 4, 1970 the State Capital, Brunei Town, was renamed Bandar Seri Begawan, to honour the Seri Begawan Sultan, Sir Muda Omar Ali Saifuddin, the Sultan's father. The official renaming ceremony took place on the town padang.

CHAPTER 13

CONSTITUTION AND ADMINISTRATION

The Brunei Constitution of September, 1959 cites Brunei as protected State in which the State's external affairs, defence and security are the responsibilities of the United Kingdom. Her Majesty the Queen's Government is represented by a High Commissioner to Brunei. The High Commissioner is to advise the State Government on all matters of the State except on other matters relating to the Muslim religion and the customs of the Malays as practised in the State.

Considering it appropriate that the existing close and special relationship between the United Kingdom and the State of Brunei, Darul-Salam, on 23rd November, 1971 the Agreement was amended so as to reflect developments that have taken place since 1959. In this new Agreement Her Majesty continues to be responsible for the external affairs of the State, and that, subject to consultation, provision for the defence and security of the State should be a task to be shared between Her Majesty and His Highness, and that the State enjoys full internal self-government.

The same Constitution provides His Highness the Sultan with supreme executive authority in the State. He is to be assisted and advised by five constituted councils; the Religious Council, the Privy Council, the Council of Ministers, the Legislative Council and the Council of Succession.

The Religious Council: In his capacity as the head of the Islamic Faith, the Sultan is advised in all Islamic matters by the Religious Council. Its members are appointed by the Sultan himself, and the Chairman or President is at present the State Religious Affairs Officer.

The Privy Council: The Sultan shall preside over this Council. The main function of the Council is to advise the Sultan in matters concerning the Royal prerogative of mercy, on the amendment or revocation of any of the provision of the Constitution, and on the appointments to Malay customary ranks, titles, honours and dignitaries. Its membership consists of the Regents (if a Council of Regency has been appointed), six ex-officio, the High Commissioner and any other persons as the Sultan may appoint.

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The Council of Ministers: The Council of Ministers considers all the executive matters and those which are to be tabled at the Legislative Council meetings. It has eleven members, namely six ex-officio, the High Commissioner and four unofficial members who are also the appointed members of the Legislative Council. His Highness the Sultan shall preside over the Council.

The Legislative Council: This Council is presided over by a speaker appointed by the Sultan either from among the Members of the Council or from among persons who are not members. The Council introduces Bills, passes laws, exercises financial controls and scrutinises government policies and their implementations.

The Council of Succession: Subject to the Constitution of the State, this Council shall determine the succession to the Throne should the need arise. Its members are the "Cheterias", four "Mentris", all Malay members of the Executive Council and six members of the Religious Council.

Administration

The Mentri Besar is responsible to the Sultan for the exercise in the State of all Executive authority. He is assisted by three senior key officials, the State Secretary, the Attorney General and the State Financial Officer.

The State Secretary is the principal officer in charge of administrative affairs. The Attorney-General heads the Criminal Prosecution Department and the State Financial Officer is the principal officer responsible for the State financial matters.

Each individual department is headed by the respective head who must consult the State Secretary on any proposed departmental policies before implementing them. The four District Officers are also responsible to the State Secretary.

State Departments have their own branches in districts and these branches are responsible to their immediate departmental heads. In districts where there are no departmental branches then the respective District Officers will act as such.

Judiciary

The Judiciary is a separate body and is responsible for the judicial powers of His Highness the Sultan. His Highness may refer any question involving the meaning and interpretation of any the provisions of this constitution to the Interpretation Tribunal established accordingly.

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The Public Service

The Public Service Commission provides the staff for all Government departments and other units of the administration except for the armed forces, the police force and the prison service for the State. The Commission consists of a Chairman and four other persons appointed by the Sultan. Members of the Commission are appointed for a period of three years and at the end of the period they are still eligible for reappointment.

Except in the exercise of the power conferred upon him, His Highness the Sultan shall consult and act in accordance with the recommendation of the Public Service Commission. The power to appoint, transfer, promote, dismiss or exercise disciplinary control over public officers is largely vested in His Highness. A special Provision is made for Overseas Officers.

List of Chief Ministers

September 1959/July 1961:

Yang Amat Berhormat, Pehin Datu Perdana Mentri Dato Seri Utama Awang Haji Ibrahim bin Mohd. Jahfar, D.K., S.P.M.B., D.S.N.B., C.B.E., P.O.A.S.

August 1961/May 1967:

Yang Amat Berhormat, Dato Seri Paduka Marsal bin Ma'un, S.P.M.B., D.S.N.B., P.O.A.S.

June 1967:

Yang Amat Berhormat, Pengiran Setia Negara Pengiran Haji Mohd. Yusuf bin Pengiran Haji Abdul Rahim, S.P.M.B., D.S.N.B., P.O.A.S.

Members of the Privy Council

Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Sir Muda Hassanah Bolkiah Mu'izzaddin Waddaulah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., D.P.K.G., D.P.K.T., P.S.P.N.B., P.S.N.B., P.S.L.J., S.P.M.B., P.A.N.B., G.C.M.G., D.K. (Kelantan), D.K. (Johor), Sultan dan Yang Di-Pertuan Negeri Brunei Darus Salam.

1. Yang Terutama Awang A.R. Adair, C.V.O., M.B.E., Pesuruhjaya Tinggi Duli Yang Maha Mulia Baginda Queen di-Brunei, Brunei.

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2. Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin ibni Al-Marhum Sultan Muhammad Jamalul 'Alam, D.K., K.C.M.G., P.H.B.S., Brunei.
3. Yang Teramat Mulia Seri Paduka Duli Pengiran Perdana Wazir Sahibol Himmah Wal-Waqar, Pengiran Muda Mohamed Bolkiah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., P.H.B.S., Brunei.
4. Yang Teramat Mulia Seri Paduka Duli Pengiran Bendahara Seri Maharaja Permai Suara, Pengiran Muda Haji Hashim ibni Al-Marhum Duli Pengiran Bendahara, Pengiran Anak 'Abdul Rahman, D.K., S.P.M.B., P.O.A.S., Brunei.
5. Yang Teramat Mulia Seri Paduka Duli Pengiran Di-Gadong Sahibol Mal, Pengiran Anak Haji Khamis ibni Al-Marhum Kebawah Duli Sultan Hashim, D.K., D.P.M.B., P.O.A.S., Brunei.
6. Yang Teramat Mulia Seri Paduka Duli Pengiran Pemancha Sahibol Rae' Walmashuarah, Pengiran Muda Haji Mohamed 'Alam ibni Al-Marhum Duli Pengiran Bendahara Pengiran Anak 'Abdul Rahman, D.K., S.P.M.B., D.S.N.B., O.B.E., P.O.A.S., P.H.B.S., Brunei.
7. Yang Teramat Mulia Seri Paduka Duli Pengiran Temenggong Sahibol Bahar, Pengiran Haji Mohamed bin Pengiran Piut, D.K., S.P.M.B., D.S.N.B., P.A.N.B., M.B.E., P.O.A.S., Brunei.
8. Yang Berhormat Pehin Orang Kaya Laila Setia Bakti Di-Raja, Dato Seri Utama Awang Isa bin Pehin Datu Perdana Menteri Awang Haji Ibrahim, D.K., S.P.M.B., D.S.N.B., O.B.E., P.H.B.S., Penasehat Umum Kebawah Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Negeri Brunei, Brunei.
9. Yang Amat Mulia Pengiran Setia Negara, Pengiran Haji Mohd. Yusuf bin Pengiran Haji 'Abdul Rahim, D.K., S.P.M.B., D.S.N.B., C.B.E., P.O.A.S., P.H.B.S., Mentri Besar, Brunei.
10. Yang Amat Mulia Pengiran Maharaja Anakda, Pengiran Haji Ahmad ibni Al-Marhum Duli Pengiran Bendahara Pengiran Anak Haji Mohd. Yassin, D.P.M.B., Brunei.
11. Yang Berhormat Pehin Orang Kaya Shahbandar Dato Setia Awang Haji Ahmad bin Daud, D.S.N.B., M.B.E., P.O.A.S., Brunei.

CONSTITUTION AND ADMINISTRATION

12. Yang Amat Mulia Pengiran Paduka Tuan Sahibol Karib, Pengiran Haji Abu Bakar ibni Al-Marhum Duli Pengiran Pemancha Pengiran Anak Mohd. Saleh, D.S.N.B., P.O.A.S., Brunei.
13. Yang Amat Mulia Pengiran Jaya Negara, Pengiran Haji Abu Bakar bin Pengiran 'Umar, D.K., D.S.N.B., M.B.E., P.H.B.S., P.O.A.S., Brunei.
14. Yang Berhormat Pehin Jawatan Dalam Dato Setia Awang Haji Mohamed Noor bin Pehin Orang Kaya Laksamana Awang Haji 'Abdul Razak, D.S.N.B., P.O.A.S., Brunei.
15. Yang Berhormat Pehin Orang Kaya Amar Di-Raja, Dato Seri Utama Awang Haji Mohd. Jamil bin Pegawai Pehin Udana Khatib Awang Haji 'Umar, D.K., D.S.L.J., D.P.M.B., P.H.B.S., P.O.A.S., Brunei.
16. Yang Berhormat Pehin Orang Kaya Di-Gadong Dato Laila Utama Awang Haji Mohamed Yusof bin Pehin Jawatan Dalam Awang Haji Mohamed Hussein, D.K., P.S.N.B., D.P.M.B., P.O.A.S., Brunei.
17. Yang Berhormat Begawan Pehin Udana Khatib Dato Seri Paduka Awang Haji 'Umar bin Awang Rendah, S.P.M.B., D.S.N.B., P.H.B.S., Brunei.
18. Yang Berhormat Pehin Orang Kaya Laksamana Dato Seri Utama Awang Haji 'Abdul Rahman bin Pehin Orang Kaya Shahbandar Awang Haji Mohamed Taha, D.K., S.P.M.B., D.S.L.J., P.S.B., P.O.A.S., P.H.B.S., Brunei.
19. Yang Berhormat Pehin Jawatan Luar Pekerma Raja, Dato Seri Utama Awang Haji Mohamed Taha bin Pehin Ratna Di-Raja Awang Hussein, D.K., S.P.M.B., D.S.N.B., P.O.A.S., Brunei.
20. Yang Berhormat Pehin Datu Temenggong Awang Lim Cheng Choo, S.N.B., S.M.B., P.O.A.S., Brunei.
21. Yang Amat Mulia Pengiran Kerma Negara, Pengiran Anak 'Abdul Wahab bin Pengiran Sabtu Kemaluddin, D.S.N.B., S.M.B., P.H.B.S., Brunei.
22. Yang Amat Mulia Pengiran Penggawa Laila Bentara Istiadat Di-Raja Dalam Istana, Pengiran Haji Mokhtar Puteh bin Pengiran Haji Rajid, D.K., D.S.N.B., D.P.M.B., P.N.B., P.H.B.S., Brunei.

CONSTITUTION AND ADMINISTRATION

23. Yang Amat Mulia Pengiran Sanggamara Di-Raja, Pengiran Anak Chuchu ibni Al-Marhum Pengiran Muda Mohd. Salleh, D.K., S.L.J., P.H.B.S., Brunei.
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27. Yang Berhormat Pehin Orang Kaya Ratna Di-Raja, Dato Seri Utama Awang Haji Mohd. Zain bin Haji Serudin, D.K., D.S.L.J., P.H.B.S., Brunei.
28. Yang Berhormat Pehin Datu Saudagar Derma Laila Dato Setia Awang R. T. Lloyd Dolbey, D.S.N.B., D.S.L.J., P.O.A.S., Brunei.
29. Yang Berhormat Pehin Datu Derma Setia, Dato Setia Awang P. A. Coates, D.S.N.B., D.S.L.J., D.P.M.B., Brunei.
30. Yang Amat Mulia Pengiran Maharaja Setia Laila Di-Raja Sahibol Irshad, Pengiran Anak Haji 'Abdul Aziz bin Pengiran Jaya Negara Pengiran Haji Abu Bakar, D.K., P.H.B.S., Brunei.
31. Yang Berhormat Pehin Orang Kaya Laila Kanun Di-Raja, Dato Seri Utama Awang Idris Talog Davies, D.K., S.P.M.B., D.S.N.B., C.B.E., P.H.B.S., A.K. (Kelantan), P.J.K. (Trengganu), Brunei.
32. Yang Berhormat Pehin Orang Kaya Khazanah Negara Laila Di-Raja, Dato Seri Utama Awang John Lee, D.K., S.P.M.B., C.B.E., P.H.B.S., Brunei.
33. Yang Amat Mulia Pengiran Dipa Negara, Pengiran Momin bin Pengiran Haji Ismail, D.P.M.B., P.O.A.S., P.H.B.S., Brunei.
34. Yang Berhormat Pehin Orang Kaya Tabib Laila Di-Raja, Dato Seri Paduka Dr. P. I. Franks, S.P.M.B., D.S.N.B., P.H.B.S., P.O.A.S., P.I.S. (Johor), Brunei.

CONSTITUTION AND ADMINISTRATION

35. Yang Amat Mulia Pengiran Putera Negara, Pengiran Damit bin Pengiran Metussin, D.P.M.B., S.L.J., P.J.B., P.H.B.S., Brunei.
36. Yang Berhormat Begawan Pehin Khatib Dato Seri Utama Awang Haji Metali bin Matyassin, D.K., D.P.M.B., P.O.A.S., Brunei.
37. Yang Berhormat Pehin Orang Kaya Datu Patinggi Maha Kurnia Di-Raja, Dato Seri Utama Sir Dennis Charles White, D.K., K.B.E., C.M.G., O.S.S.

The Council of Ministers

Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Sir Muda Hassanah Bolkiah Mu'izzaddin Waddaulah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., D.P.K.G., D.P.K.T., P.S.P.N.B., P.S.N.B., P.S.L.J., S.P.M.B., P.A.N.B., G.C.M.G., D.K. (Kelantan), D.K. (Johor), Sultan dan Yang Di-Pertuan Negeri Brunei Darus Salam.

1. Yang Terutama Awang A. R. Adair, C.V.O., M.B.E., Pesuruhjaya Tinggi Duli Yang Maha Mulia Baginda Queen di-Brunei, Brunei.
2. Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin ibni Al-Marhum Sultan Muhammad Jamalul 'Alam, D.K., K.C.M.G., P.H.B.S., Brunei.
3. Yang Teramat Mulia Seri Paduka Duli Pengiran Perdana Wazir Sahibol Himmah Wa-Waqar, Pengiran Muda Mohamed Bolkiah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., P.H.B.S., Brunei.
4. Yang Berhormat Pehin Orang Kaya Laila Setia Bakti Di-Raja, Dato Seri Utama Awang Isa bin Pehin Datu Perdana Menteri Awang Haji Ibrahim, D.K., S.P.M.B., D.S.N.B., O.B.E., P.H.B.S., Penasehat Umum Kebawah Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Negeri Brunei, Brunei.
5. Yang Amat Mulia Pengiran Setia Negara, Pengiran Haji Mohd. Yusuf bin Pengiran Haji 'Abdul Rahim, D.K., S.P.M.B., D.S.N.B., C.B.E., P.O.A.S., P.H.B.S., Menteri Besar, Brunei.
6. Yang Amat Mulia Pengiran Dipa Negara, Pengiran Momin bin Pengiran Haji Ismail, D.P.M.B., P.H.B.S., P.O.A.S., Setiausaha Kerajaan, Brunei.

CONSTITUTION AND ADMINISTRATION

7. Yang Berhormat Pehin Orang Kaya Laila Kanun Di-Raja, Dato Seri Utama Awang Idris Talog Davies, D.K., S.P.M.B., D.S.N.B., C.B.E., P.H.B.S., A.K. (Kelantan), P.J.K. (Trengganu), Peguam Negara, Brunei.
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9. Yang Berhormat Pehin Orang Kaya Ratna Di-Raja, Dato Seri Utama Awang Haji Mohd. Zain bin Haji Serudin, D.K., D.S.L.J., P.H.B.S., Pemangku Penasehat Ugama, Brunei.
10. Yang Berhormat Orang Kaya Pekerma Dewa, Awang Lukan bin Uking, P.O.A.S., Brunei.
11. Yang Amat Mulia Pengiran Shahbandar Sahibol Bandar, Pengiran Haji Mohamed bin Pengiran Piut, D.K., S.P.M.B., D.S.N.B., P.A.N.B., M.B.E., P.O.A.S., Brunei.
12. Yang Berhormat Awang Haji Sapawi bin Metassim, Kuala Belait.
13. Yang Berhormat Dato Setia Awang Mohd. Taib bin Awang Besar, D.S.N.B., D.P.M.B., M.B.E., P.H.B.S., Brunei.
14. Yang Berhormat Pehin Jawatan Luar Pekerma Raja, Dato Seri Utama Awang Haji Mohamed Taha bin Pehin Ratna Di-Raja Awang Hussein, D.K., S.P.M.B., D.S.N.B., P.O.A.S., Brunei.

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Yang Teramat Mulia Seri Paduka Duli Pengiran Pemancha Sahibol Rae' Walmashuarah, Pengiran Muda Haji Mohamed 'Alam ibni Al-Marhum Duli Pengiran Bendahara Pengiran Anak 'Abdul Rahman, D.K., S.P.M.B., D.S.N.B., O.B.E., P.O.A.S., P.H.B.S., Speaker, Majlis Mashuarat Negeri, Brunei.

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CONSTITUTION AND ADMINISTRATION

2. Yang Amat Mulia Pengiran Dipa Negara, Pengiran Momin bin Pengiran Haji Ismail, D.P.M.B., P.H.B.S., P.O.A.S., Setiausaha Kerajaan, Brunei.
3. Yang Berhormat Pehin Orang Kaya Laila Kanun Di-Raja, Dato Seri Utama Awang Idris Talog Davies, D.K., S.P.M.B., D.S.N.B., C.B.E., P.H.B.S., A.K. (Kelantan), P.J.K. (Trengganu), Peguam Negara, Brunei.
4. Yang Berhormat Pehin Orang Kaya Khazanah Negara Laila Di-Raja, Dato Seri Utama Awang John Lee, D.K., S.P.M.B., D.S.N.B., C.B.E., P.H.B.S., Pegawai Kewangan Negara, Brunei.
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9. Yang Berhormat Pehin Jawatan Luar Pekerma Raja, Dato Seri Utama Awang Haji Mohamed Taha bin Pehin Ratna Di-Raja Awang Hussein, D.K., S.P.M.B., D.S.N.B., P.O.A.S., Brunei.
10. Yang Amat Mulia Pengiran Setia Raja, Pengiran Jaya bin Pengiran Haji Rajid, D.K., D.H.P.N.B., P.H.B.S., Brunei.
11. Yang Berhormat Pehin Orang Kaya Amar Di-Raja, Dato Seri Utama Awang Haji Mohd. Jamil bin Begawan Pehin Udana Khatib Awang Haji 'Umar, D.K., D.S.L.J., D.P.M.B., P.H.B.S., P.O.A.S., Brunei.
12. Yang Berhormat Awang Haji 'Abdul 'Aziz bin Begawan Pehin Udana Khatib Awang Haji 'Umar, S.L.J., Brunei.
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CONSTITUTION AND ADMINISTRATION

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15. Yang Berhormat Awang Arif bin Mujun, Kuala Belait.
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18. Yang Berhormat Pengiran Haji Abu Bakar bin Pengiran Mohd. Salleh, Brunei.
19. Yang Berhormat Pehin Orang Kaya Setia, Awang Haji Ali bin Ismail, Brunei.
20. Yang Berhormat Awang Haji Abu Hanifah bin Mohd. Said, Tutong.

Printed by:
BRUNEI DAILY NEWSPAPER & PRINTING CO.,
BANDAR SERI BEGAWAN,
BRUNEI.



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LAW AND ORDER

During the year under review the Assistant Warden was promoted to the rank of Warden, a Sergeant Warden was promoted to the rank of Chief Warden, a Corporal Warden was promoted the rank of Sergeant Warden and a Warden was promoted to the rank of Corporal Warden.

Eight Warders were recruited. Six probationary Warders resigned while still on probation, one Warden resigned with one month notice before completion of agreement. The Prison Officer and the Chief Warden retired on pension.

The following is the summary of the estimated budget for the year review:—

(i) Total Personal Emoluments	\$251,977
(ii) Total other charges	
Annually recurrent	73,300
(iii) Total Special Expenditure	33,900
Total	\$359,177

A total of \$4,238.50 was collected from the sale of prison industries.

Vocational guidance and education are conducted to cultivate the spirit of labour and to give inmates the knowledge necessary for their specific vocations and eventually to lead them to create a resolution of self-support by their own labour.

Male prisoners are assigned to various jobs, namely carpentry, gardening, simple farming, cooking and cleaning of the prison compound and buildings. They are assigned to any one of these jobs in accordance with their ability, character and adaptability. Female prisoners are employed on household duties and undertake sewing and mending as occasion demands.

Apart from vocational training, prisoners are encouraged to attend Malay-medium classes in the prison. Classes are conducted in the evenings and at weekends by the Education Department.

Muslim prisoners are given facilities to say their prayers in the prison itself and during the month of Ramadhan they are allowed to observe the fast.

Every evening inmates are allowed to play games such as badminton, volley-ball, ping-pong and sepak raga.

LAW AND ORDER

The prison has a small but popular library where reading material in Malay, English and Chinese are provided. Radio listening is permitted daily and film shows are given fortnightly.

A senior Hospital Assistant paid two visits a week to the prison to give treatment to prisoners when required. Emergency or serious cases were brought to the General Hospital for treatment. The health of prisoners was generally good throughout the year.

Visiting Justices made frequent visits to the prison. They received no major complaints from the prisoners and reported favourably on the prison compound and building and on the treatment of the prisoners.

The Visiting Justices appointed for the year 1971 were:—

1. Awang Puasa bin Tudin
2. Awang Ali Akbar bin Abu Bakar
3. Awang Ahmad bin Jumat
4. Awang Hamdani bin Abd. Rahman
5. Awang Yunus bin Haji Hussain
6. Awangku Omar bin Pengiran Sabtu
7. Awang Kassim bin Daud
8. Awang Hussain bin P.O.K. Di-Gadong Haji Mohd. Yussof
9. Awang Daniel F.K. Wong
10. Awang Yahya bin Mohd. Yusof
11. Awang Haji Mohd. Jaafar bin Daud
12. Awang Lim Jock Seng

Juvenile offenders are either sent to Rumah Penjara, Jerudong or the Sarawak Approved School for detention. During the year under review one offender was in detention and one was in detention and one was discharged from the Sarawak Approved School.

A proper Boys' Home has not yet started although the sum of \$500,000 has been approved.

During the year under review there was no escaped and no execution.

LAW AND ORDER

Prisoners are classified as follows:—

Recidivits;
First offenders;
Female offenders;
Under remand;
and young prisoners.

The following gives the classification by race, age group and length of sentence for the year under review:—

(i) Classification by race:

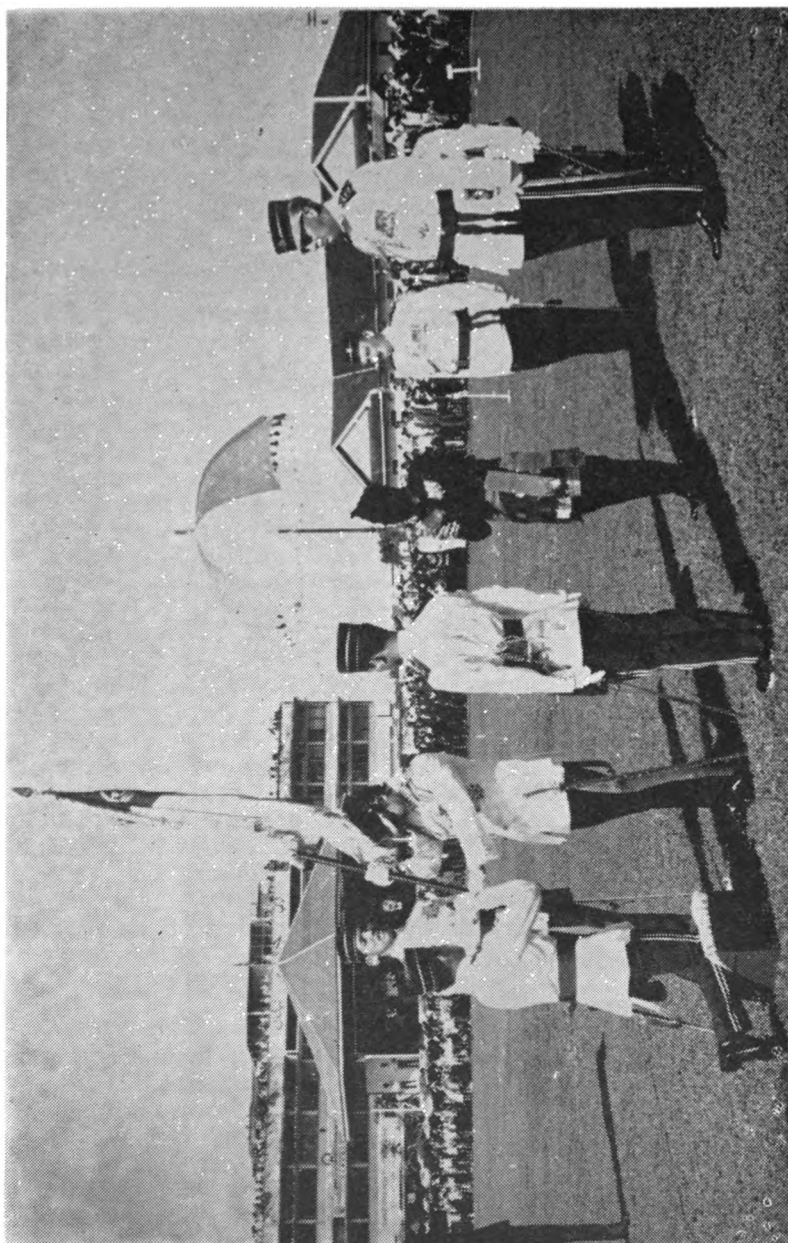
Malay	43
Chinese	17
Iban	68
Others	4
Total	132

(ii) Classification by age group:

20 years and under	37
21 years to 30 years	61
31 years to 40 years	17
41 years to 50 years	7
Over 50 years	10
Total	132

(iii) Classification by sentences:

Under remand	61
Under 1 month	44
1 to 6 months	23
7 to 12 months	3
13 to 24 months	1
Over 2 years	—
Total	132



(c) Royal Brunei Malay Regiment

General

The roles of the Regiment remain:

1. Deterrence to any outside power or intervening directly or indirectly in the State and to any subversive elements actual or potential operating in the State.
2. Public Order in support of the Police and Civil Power.
3. Counter Revolutionary Operations both jungle and urban.
4. Community Relations by which the Regiment is identified with the Government and Civil population.
5. Provision of troops for State Ceremonial functions.

The Regiment remained operating on functional organisation. The formation of a 5th Rifle Company in July 1971 strengthened further the viability of the land force elements.

Personnel

Command of the Regiment changed on 4th December 1971 when Colonel Dato B.F.L. Rooney D.P.M.B., O.B.E. succeeded Colonel Dato J.J.H. Simpson P.S.P.N.B., D.S.N.B., D.K.G.

The strength of the Regiment on 31st December 1971 was 72 Officers and 1202 other ranks. This strength includes Seconded British personnel from the Army, Royal Navy and Royal Air Force whose specialist knowledge are still required in the Regiment. The services of the seconded Malayan Other Ranks (MOR) of the British Army are also being retained. They are now being employed on contract in the Regiment as their services with the British Army were terminated on disbandment of the MOR elements.

Training

In 1971 three major exercises were carried out during the period 15th April to 21st May 1971. Exercise LAST FLYING was set by the Regiment for 2nd Battalion 2nd King Edward VII's Goorkha Rifles (2/2 GR). Elements of the Royal Brunei Malay Regiment took part in the exercise which was carried out in the Temburong District from 15th April to 24th April 1971. This was followed by Exercise SENANG JALAN which took place in Brunei/Muara and Temburong Districts from 27th April to 7th May 1971. A visiting sub-unit of the British Army from the United Kingdom took part in the exercise in conjunction with the Regiment.

LAW AND ORDER

The most ambitious exercise was Exercise NEW LOOK II which took place throughout the State in May 1971. This exercise was set jointly by the Regiment and Headquarters 3 Commando Brigade Royal Marines, 40 Commando Royal Marines, Artillery, Engineer and Air components of 3 Commando Brigade and 2/2 GR also took part in the Exercise besides the Royal Brunei Malay Regiment.

Sub-units of the Regiment carried out small scale exercises throughout the year.

A number of men were sent overseas for training. The Regiment for the first time sent two officers for staff training. The two officers successfully completed their course at Staff College, Camberley, England and Staff College, Queenscliff, Australia at the end of 1971. Four officer cadets were commissioned by December 1971 having successfully completed their training at Officer Cadet School, Portsea, Australia.

Four trainee pilots under went basic helicopter pilots course at South East Asia Helicopter (Sdn.) Berhad, Kuala Lumpur. They should qualify for their wings in early 1972.

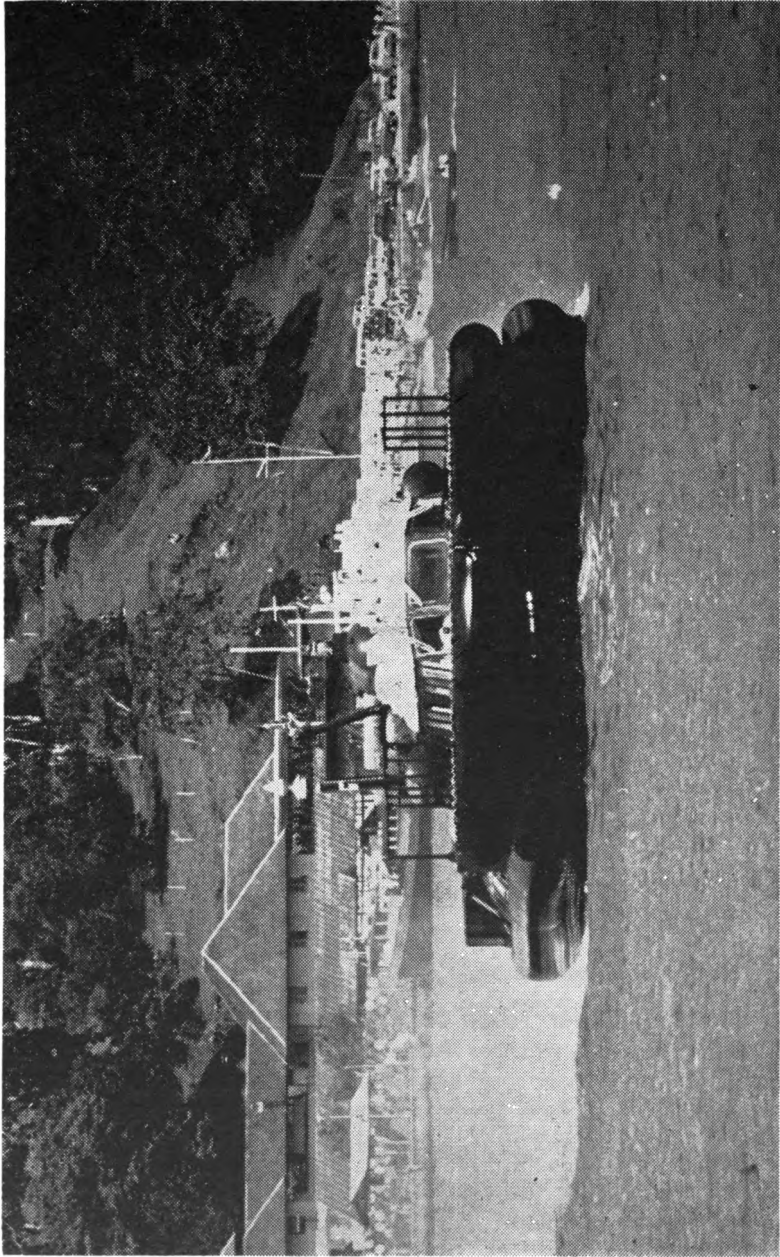
In summary, the numbers attending courses overseas were as follows:

To	Officers	ORs
UK	5	32
Australia	7	1
Singapore/Malaysia	4	27
Hong Kong	—	2

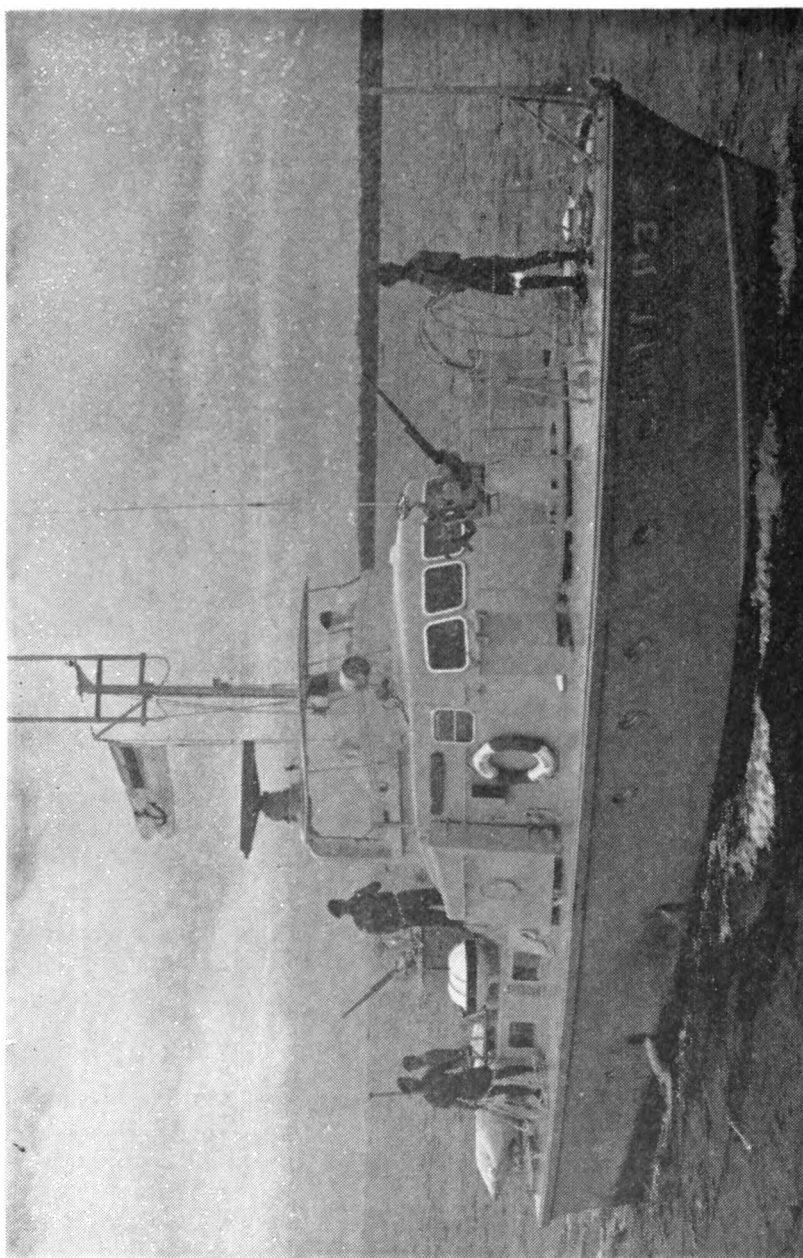
Civil Community Relations

Combat Engineer Troop completed a number of projects in the Temburong District. These projects which included the construction of jetties and wooden bridges and the clearance of rivers were designed to give people in the rural areas more facilities, and an improved communication.

The Air Wing carried out 2007 sorties which comprised 2272 flying hours including 98 medical evacuations. The majority of the sorties was shared by the Medical Services Flying Doctor and the Regiment's operational needs.



One of the equipments of the Royal Brunei Malay Regiment — the Hovercraft.



..... and another equipment — a patrol boat.

LAW AND ORDER

In early 1971, an Army Cadet Corps was formed under the auspices of the Regiment. Four schoolboy cadet platoons were formed in major schools in the State. The aims of raising the Cadet Corps were to enable schoolboys to learn the tasks and responsibilities of the Regiment, to install into them a sense of discipline and to develop their leadership qualities. Initial application to join greatly exceeded capacity. However, it was envisaged that three more platoons would be raised to bring the total to seven platoons.

Equipment

The two Wessex Helicopters have been sold and replaced by two Bell 212 helicopters. Two further Bell 206 Jetrangers designed as gunships arrived in February 1971. With these new arrivals the Regiment's Air Wing now consists of:

2 Bell 212 helicopters — medium lift helicopters.

2 Bell 205A helicopters — medium lift helicopters.

4 Bell 206 Jetrangers — communications and gunship
helicopters.

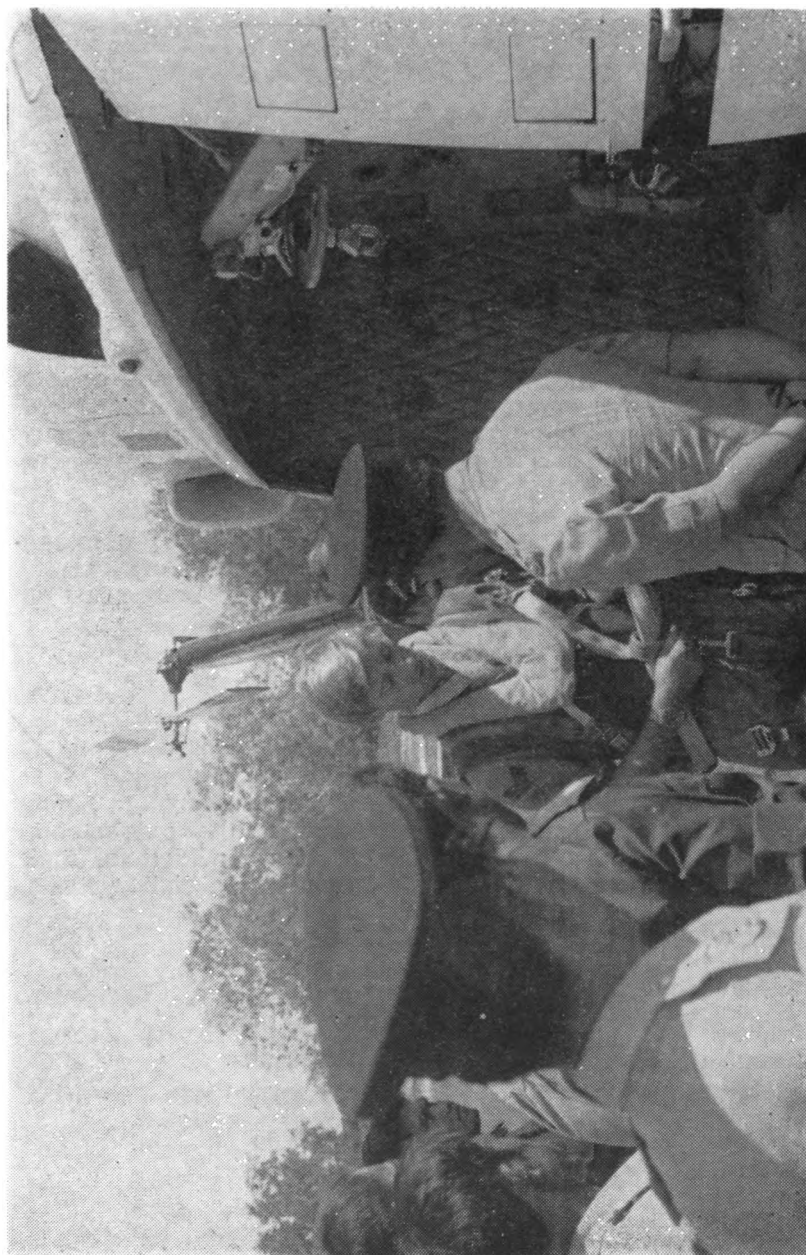
His Highness The Sultan's Flight was established in January 1971 with the arrival of HS 748. It has been in regular service as a trooping and freight aircraft when not required for VIP flight.

With the arrival of the two 62 foot Raja Isteri Class Coastal Patrol Boats in February 1971 and the SRN 6 hovercraft in May 1971 the Flotilla has sufficient craft for effective coastal surveillance for short periods.

Tampella mortars have replaced British 81mm mortars in 1971 as Tampella spares and ammunition are readily available in Singapore.

Camp Development

Among the major projects completed in 1971 were 44 units of married other ranks quarters, six flats for married non-commissioned officers, and four units of senior officers quarters. Work on the rifle range was completed when the electronic target device was installed in December 1971. Work on six blocks of single other ranks barracks, two blocks of G type married quarters and the Signal Centre Complex was in progress and scheduled to be completed early 1972.



Officers and men of the Fire Brigade receiving Helicopter Training.

(d) Fire Brigade

General Survey of the Year

Apart from an increase in establishment of 15 firemen there was no expansion in the Brigade. However Fire Prevention increased quite rapidly and much work and report writing occupied the staff to an extent of overloading the clerks causing some delay in correspondence.

Emergency calls increased from 258 to 319 an overall increase of 25%. This can be attributed to two associated conditions. Fire Stations have been built over the last two years and, as they become aware of the facility, the general public have co-operated by reporting calls, particularly people passing by in cars, stopping at fire stations enroute to make their report. The tragic death of two teachers at the Anthony Abell College, Seria in a gas explosion is described elsewhere in this report.

The first two officers of the brigade to attend a prescribed course at the Fire Service Technical College Moreton-in-Marsh, England returned in November this year having both qualified as Breathing Apparatus Instructors.

Operational Strength

After an increase in authorised establishment of 15 firemen, 18 recruits were enlisted but by the end of the year 34 vacancies existed. The number of firemen vacancies are largely the result of resignations of men joining the Brunei Shell petroleum Safety Department as firemen, where, not only can they obtain comparable salaries but accommodation is also provided for their families, a big inducement for men employed on shift systems.

1. Number and Type of Vacancies

Station Officer	— 6 vacancies
Asst. Station Officer	— 8 vacancies
Fireman	— 18 vacancies
Clerk Grade "B"	— 1 vacancy
Cook	— 1 vacancy
Total	34 vacancies

2. Promoted

To Divisional Officer — S. O. Wahabi bin Metussin promoted to Divisional Officer with effect from 1-2-1971.

LAW AND ORDER

To Station Officer

The following Assistant Station Officers promoted to Station Officer on one year's probation with effect from 1-9-1970:—

1. ASO. Abu Bakar bin Haji Ali Hashim;
2. ASO. Ahmad bin Md. Yusof;
3. ASO. Sajir bin Haji Hassan;
4. ASO. Salim bin Saidi; and
5. ASO. Omar bin Haji Md. Said.

To Asst. Station Officer

The following Firemen promoted to Assistant Station Officer with effect from 1-2-1971:—

1. FN. 74 Haji Ibrahim bin Ghani;
2. FN. 69 Hitam bin Sidek;
3. FN. 89 Md. Hussin bin Md. Salleh, and
4. FN. 127 Awangku Bakar bin Pengiran Hitam.

3. Advancement in Class

To Second Class Fireman:—

- | | | |
|--------------------------------|---|----------------|
| 1. Md. Tahir bin Haji Mastan | — | w.e.f. 1-10-70 |
| 2. Damit bin Salleh | — | w.e.f. 1-10-70 |
| 3. Ramlee bin Abu Bakar | — | w.e.f. 1-10-70 |
| 4. Awangku Yusof bin Pg. Besar | — | w.e.f. 1-10-70 |
| 5. Zaini bin Maidin | — | w.e.f. 1-10-70 |

Building and Equipment

Despite the desperate need for stations at Seria and Kuala Belait, no new accommodation was provided this year. The Headquarters Station at Bandar Seri Begawan is now becoming overcrowded as, being the oldest station in State, no provision was made for extending the premises if required. However a decoration programme has improved conditions somewhat.

Two new water tankers were purchased during the year and the Brigade is now equipped as follows:—

Turntable Ladders	—	2
Pump Escapes	—	4
Pumps (including Land Rovers)	—	13
Trailer Pumps	—	9
Portable Pumps	—	9
Emergency Tender	—	1
Hose/foam lorry	—	1
Personnel/equipment carriers	—	3
Water Tankers	—	2
Fire Floats	—	3
Speedboats	—	1

LAW AND ORDER

Summary of Call

Types of Call	B.S. Begawan	Bangar	K. Belait	Muara	Seria	Tutong	Total
Domestic Premises	8	—	2	1	2	3	16
Commercial	9	1	2	—	4	3	19
Jungle/Grass	35	3	17	19	40	74	188
Motor Vehicles	16	—	—	—	2	4	22
Electrical	4	1	1	1	—	—	7
Miscellaneous	3	—	—	—	—	—	3
False/Good Intent	8	—	2	—	1	—	11
False/Malicious	3	—	1	—	—	—	4
Special Services	22	—	—	—	—	4	26
Outboard Engines	—	1	—	—	—	—	1
River Rescue	1	—	—	—	—	—	1
Controlled Burning	4	—	—	—	—	1	5
Special Requests	13	3	—	—	—	—	16
Total	126	9	25	21	49	89	319

LAW AND ORDER

The following increases over last year are to be noted:—

Domestic Fires increased	from 1 to 16
Commercial Fires	from 6 to 19
Jungle/Grass	from 110 to 188
Motor Vehicles	from 13 to 22
False Alarm Good Intent	from 5 to 11
False Alarm Malicious	from 1 to 4

Overseas Training

In England:

D.O. Wahabi bin Metussin and ASO. Mohd. Saad bin Taib underwent officers training course in United Kingdom at various centres under the Home Office, Ruskin Avenue Kew Richmond Surrey for a period of three months with effect from 17-8-1971.

In Hongkong:

ASO. Awangku Ahmad bin Pengiran Apong and ASO. Awangku Omarali bin Pengiran Idris are undergoing a full six months' officers training course in Hongkong with effect from 4-12-1971.

In Malaya:

SO. Pengiran Daudin bin Pengiran Haji Tengah, SO. Sajir bin Haji Hassan and SO. Abu Bakar bin Haji Ali Hashim underwent officers training course at Fire Service Training School, Kuala Lumpur for a period of five months with effect from 14-3-1971.

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The two officers who went to England were the first to attend specific courses and both qualified as Breathing Apparatus Instructors, a very commendable result on a course which combines instructional techniques with tough physical demands. The two officers with Hongkong Training School attended two English courses with the Royal Brunei Malay Regiment to improve their language standard before going to Hongkong. Their keenness is typical of the type of officer now appearing in the brigade.

Local Training

One Station Officer and two Assistant Station Officers have been detailed as instructors and a modest beginning has been made on practical training. A one month's refresher course has been programmed and within two years all firemen will have attended this course after which the syllabus will be re-programmed for more advanced work.

This type of training has to be restricted, at present, to practical work using the yard and drill tower at Muara Fire Station because of lack of accommodation. Before the work of this section can be increased suitable premises will have to be found or built.

Co-operative training with the Royal Brunei Malay Regiment Air Wing has commenced with the view to transporting men and equipment to inaccessible fires. The emphasis is on off-shore work: should a ship report a fire aboard, a fire-fighting force can be winched aboard to assist the captain in his attack until the ship reaches port.

Fire Prevention

This has increased to such an extent that a trainee Fire Prevention Officer was found early in the year to assist the Controller. Much of the work was initiated by the Municipal Boards and three types of inspection are now being carried out.

- (i) **Surveys:** A thorough and comprehensive examination covering every aspect of fire prevention and protection of the premises.
- (ii) **Specific:** A limited inspection confined to specific aspect of fire prevention (e.g. safety in the use of household gas).
- (iii) **Routine:** A periodic inspection normally carried out at regular intervals.

Some 30 full surveys were carried out and full reports prepared. A further seven full reports were made on drawings submitted for fire brigade requirements and recommendations.

Twenty eight specific surveys were made and this included inspecting 14 schools where gas is used. In addition seven visits were made to assess the fire-fighting equipment required in new or altered premises.

At the request of the Municipal Boards six cinemas in Bandar Seri Begawan, Seria and Kuala Belait are inspected every month and reports made to the individual Board Chairman.

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LAW AND ORDER

The maintenance scheme for extinguishers in Government premises has been continued and efforts are being made to check, catalogue and find that equipment which has been supplied by private contractors for Government schemes and have therefore been neglected in the past.

Fires of Special Interest

On 17th March 1971, two teachers at Anthony Abell College died as a result of injuries sustained in an explosion, which occurred at approximately 7.15 a.m.

Due to a leak in the supply pipe, local towns gas had accumulated within the metalwork room and, when the two masters enter the area in preparation for the day's lessons some unknown agent ignited the gas causing widespread damage in the area. Prompt aid from fellow teaching staff failed tragically to save the lives of the two men involved.

On 24th March 1971, an explosion occurred in a bitumen tank at the site of the new international airport.

About six tons of bitumen were being prepared by heating, as a preliminary to the main task of supplying hot compound for the runway. An excessive build-up of pressure probably due to insufficient venting blew out one end of the tank. An employee close by was badly burned by hot bitumen. Firemen covered the remaining bitumen with foam and cooled the tank.

A defective kerosene stove caused a fire in a private house at Kuala Belait on 15th July, 1971. Two jets from one fire appliance failed to prevent severe damage being sustained by the building.

A serious fire occurred in saw-mills adjacent to the Tutong River. The fire was discovered by a passing motorist on the Tutong-Seria road and he made a report to the fire station at Tutong at 10.20 p.m. on 27th July, 1971. Six jets were used to fight the fire, water being obtained from the river using three pumping appliances.

The Bendahara's house in Bandar Seri Begawan was destroyed by fire on the 30th July, 1971 the call being received from a small boy at the station at 11.06 a.m. Six jets were used working from hydrants and by pumping water from the river by the fire-floats. Nine appliances attended this fire.

A spillage of Calcium Carbide on board the M.V. "Union" resulted in the production of acetylene when the carbides became damp. The use of water would have made the situation worse and the fire was extinguished by using sand.

LAW AND ORDER

A leakage of gas in the kitchen of a restaurant ignited and gave the firemen a difficult job on the 5th floor of a building in Bandar Seri Begawan at 7.00 a.m. on 19th October, 1971. Two employees were burned and removed to hospital where they were detained. Two jets were used to extinguish the resulting fire.

Five contractors barracks were severely damaged by fire as follows:—

Area	No. of jets	Appliance	Date	Time	Injured
Jalan Muara					
B.S. Begawan	4	3	6-5-71	2.08 a.m.	2
Muara	3	3	29-5-71	9.55 p.m.	nil
Seria	3	4	6-6-71	12.25 p.m.	nil
	(including B.S.P.)				
Jalan Muara					
B.S. Begawan	2	2	25-8-71	1.45 a.m.	4
B.S. Begawan	2	2	7-9-71	9.18 a.m.	nil

Of the many jungle/grass fires two are worth nothing as being "difficult". One occurred at the southern end of the airport runway and the brigade were occupied for four days in an effort to prevent smoke interfering with the flying schedule of the airport. Between flights valuable help was rendered by the airport fire brigade. The other incident occurred in the forest reserve at Sungai Tali where both members of the fire brigade and Forests Department worked side by side for three days to prevent damage to an area of the reserve.

One incident is worth recording here that is unconnected with fire fighting but shows the services rendered by the brigade to the public. At 2.30 p.m. on 9th May, 1971 a boat capsized in Sungai Lampai and 15 people floundered in the water. All were rescued by the brigade's fire-boat.

Many fires are small in nature and can be dealt with by firemen using beaters, extinguishers and hose reels. The larger type of fire requires the use of fire hose and jets to provide larger quantities of fire-fighting water. The larger fires are tackled by a number of jets as follows. Fire requiring:—

1 jet	2 jets	3 jets	4 jets	5 jets	6 jets
52	28	6	3	1	2

Finally it must be put on record the valuable assistance given by police and Brunei Shell Petroleum Department, Seria. The police have supplied men for fire-fighting in certain areas but elsewhere it has been noted that the timely appearance of police personnel at incidents controlling traffic and crowds has allowed firemen to get on with their job unobstructed. The co-operation between Brunei Shell Petroleum Fire Brigade and the State personnel is improving tremendously and their assistance is greatly appreciated.

CHAPTER 10

COMMUNICATIONS

(a) Postal Services

The number of post offices and postal agencies in the State remained unchanged as in 1970, i.e. seven post offices, situated in Bandar Seri Begawan, Muara, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Labi and two postal agencies functioning at Lumapas and Rambai. Postal facilities including the sale of stamps, postal orders, money orders, both ordinary and telegraphic service, savings bank etc. are available at the Bandar Seri Begawan, Kuala Belait and the Seria Post Offices while the smaller offices and the agencies undertake the sale of stamps and the receipt and delivery of ordinary and registered articles only.

Mails to and from one post office to another at the above places are conveyed by postal vans or outboard launches. As soon as the mails are unloaded at the Brunei Airport from other postal administrations, they are transported to the destinations in the State within a very short time.

The Bangar Post Office in the Temburong District is connected with the General Post Office mainly by the Marine Department outboard launches three times a week, that is, on Mondays, Wednesdays and Saturdays and mails to and from Labu also in the Temburong District are conveyed by the same means twice a week. Mail communications between Labi in the Belait District and other places are channelled through the Seria Post Office and a house to house mail delivery service is provided in this area on normal working days.

Weekly surface mails to Brunei are landed directly from ships coming from Singapore and sorted out in General Post Office, Bandar Seri Begawan before distribution. In addition to the weekly overseas surface mails, regular and daily overseas air mail services are also maintained.

In the large towns in the State such as Bandar Seri Begawan, Seria and Kuala Belait except on Fridays, Sundays and other public holidays, a house to house delivery service is provided. Pillar boxes for the receipt of letters are installed at important road junctions and other public places in the various districts and these are cleared once or twice daily except on Sundays. A daily mail delivery service is also provided in the river kampongs by the riverine post offices.

COMMUNICATIONS

Three commemorative issues of postage stamps were placed on sale in 1971 and the sales of these stamps were for a period of more than three months respectively. These three issues of stamps were:

- (a) The 10th Anniversary of the Royal Brunei Malay Regiment released on 31st May, 1971.
- (b) The 50th Anniversary of the Royal Brunei Police Force sold on 14th August, 1971.
- (c) The Installation of Y.T.M. Seri Paduka Duli Pengiran Perdana Wazir commenced sale on 27th August, 1971.

Numerous orders from abroad especially from philatelists were received and executed.

Money orders issued during the year totalled \$698,964.00 whilst those cashed amounted to \$60,194.00 compared with those issued in 1970 amounting to \$699,800.00 and those cashed totalling \$62,186.00. Postal orders sold during the year amounted to \$182,661.40 and those cashed totalled \$43,778.35 as compared to 1970 sold \$190,505.00 and cashed \$29,426.00. Stamps sold totalled \$916,351.56 compared to \$759,580.00 collected in 1970.

COMMUNICATIONS

(b) Telecommunications **Telegraphs**

Teleprinter circuits were maintained internally and externally to Kota Kinabalu and the International Telegraph Centre at Kuala Lumpur

The Singapore and Kuching circuits remain hand Keyed morse.

Service is available to most countries in the world.
Outgoing traffic figures are given below:—

No. of words transmitted to Countries Outside Borneo

Year	Private	Government	Press	Total
1966	489,770	239,339	14,395	743,504
1967	578,630	228,056	52,707	859,393
1968	687,230	153,296	47,675	888,101
1969	835,826	128,449	144,436	1,108,711
1970	697,834	107,737	130,780	936,351
1971	888,053	119,591	92,177	1,099,821

The decrease in telegraph traffic experienced in 1970, due to the introduction of telex, has been regained.

The incoming telegraph traffic figures for 1971 are comparable with the outgoing figures:—

Private	Government	Press	Total
897,960	40,997	1,614	940,571

Telex

A second line was connected between Brunei and the International Telex Switchboard in Kuala Lumpur. This enabled an increase of about 152% in outgoing traffic to be passed, totalling 87,489 chargeable minutes to 26 countries. Incoming traffic totalled about 82,000 minutes from 23 countries.

Traffic was largely distributed as follows, in chargeable minutes:—

Outgoing	U.K.	Singapore	Malaysia	Japan
1970	20,019	7,498	4,160	1,927
1971	37,754	15,547	17,371	10,892
Incoming				
1971	37,679	19,575	12,471	8,234

COMMUNICATIONS

Equipment was ordered to enable more subscribers to be connected and to improve service to Kuala Belait and Seria.

Private Telegraph Circuits

An A.F.T.N. teleprinter circuit between Brunei Airport and Kota Kinabalu Flight Information Centre was maintained and operated for the Civil Aviation Department.

A similar circuit for private operation was installed between Bandar Seri Begawan and Seria.

Telephones

Automatic Telephone Exchanges were maintained in Bandar Seri Begawan, Kuala Belait, Seria, Muara and Mile 6, Jalan Muara with small manual exchanges in Tutong and Bangar.

A 500 line extension to Kuala Belait Automatic Exchange started in 1970 was completed in May.

A trunk cable between the Seria Automatic Exchange and the L.N.G. site has been laid as far as the access road; final completion of the project will be in 1972 but in the meantime service to the L.N.G. site is by means of temporary aerial cable.

Laying and jointing of the Brunei-Muara trunk cable was started in late September but work is held up pending the construction of a roundabout at Simpang Muara.

An exchange area duct and manhole scheme for distribution cables has been constructed in Tutong and is 99% complete.

The installation of a 200 line PABX for the R.B.M.R. was started in October; it will be commissioned in February 1972.

Preliminary plans have been made for the establishing of a small automatic exchange in the Kampong Lambak area which should be operational in 1972. Land has been made available.

Improve and increased telephone service for the Brunei Garrison was agreed and a 25 line P.A.B.X. installed towards the end of the year; a 100 line P.A.B.X. will also be installed as soon as it is available.

Improvement have been made to local line distribution in the Bandar Seri Begawan area which should result in a reduced fault liability.

COMMUNICATIONS

During the year five small P.A.B.X's were installed in the Bandar Seri Begawan area and five in the Kuala Belait area. A total of 906 telephones were installed during the year as below:—

Bandar Seri Begawan	—	730
Kuala Belait	—	174
Seria	—	89
Bangar	—	2
Tutong	—	11
		906

In the same period 253 telephones were recovered, leaving a net gain of 653 stations for the year.

Telephones in use on 31st December

1966	1967	1968	1969	1970	1971
1,838	2,285	2,834	3,705	4,820	5,473

Trunk Call Traffic

External: Both ways traffic in chargeable minutes between Brunei and:

	1968	1969	1970	1971
Labuan	61,713	61,697	77,605	75,442
Kota Kinabalu	128,288	114,742	144,017	151,297
Sandakan	7,339	8,318	9,653	7,484
Tawau	5,254	11,367	12,242	7,508
Singapore	39,213	54,818	60,380	77,034
Kuala Lumpur	16,768	19,584	20,295	19,442
Hong Kong	13,481	20,925	16,708	17,854
Japan	1,424	4,945	5,673	8,012
Taiwan	571	1,560	4,379	7,598
United Kingdom	570	1,468	1,922	3,974
Australia	501	514	379	948
Others	236	853	1,574	3,838
Total	275,358	300,791	354,827	380,431

COMMUNICATIONS

The overall increase of about 7% in traffic was due to the limited number of circuits available. The most significant increase being with Singapore. Traffic with many more countries was passed resulting in the very high rate of increase to unspecified countries.

Internal and Sarawak: Traffic in chargeable minutes between Bandar Seri Begawan and:

		1968	1969	1970	1971
Kuala Belait	O/G	167,191	168,164	234,861	224,953
(inc. Seria)	I/C	153,706	158,308	221,007	257,859
Miri	O/G	21,124	26,857	32,198	31,207
	I/C	31,275	25,602	29,283	29,789
Sibu	O/G	305	180	154	372
	I/C	615	193	36	187
Kuching	O/G	227	160	585	2,674
	I/C	483	145	1,271	4,633
Total		374,926	379,609	519,395	551,674

The increase of 6% in traffic is unexpected low. This, and the reversal of greatest flow, may be due to some development projects having reached their peak and neared completion.

Radio

All external communications and internal trunk routes, with the exception of the Kuala Belait-Seria trunk cable, were provided by radio bearers.

The "Ulu" H.F. scheme was maintained to provide essential service to 26 remote villages.

Equipment to further strengthen and extend the trunk system was ordered.

Radio and electronic equipment installation and maintenance for other departments remains a heavy burden on the radio staff

COMMUNICATIONS

The work entailed in frequency allocation and licensing continues to increase. 85 licences were issued and 138 frequency allocations made, compared with 30 in 1970. No separate section deals with these and the work involved falls mainly on the technical staff.

General

The vacant post of Chief Supervisor was at last filled and the abilities of the female operators considerably improved as a result.

The post of Chief Telegraph Operator was also filled and improvements in the Telegraph Office expected.

For the first time arrangements were made for the telephone directory to be published by a commercial organisation and to contain a classified section. The extra work involved in producing the initial directory was very heavy but should result in less pressure on the clerical section in future. The first classified directory will be published in February 1972.

The most serious problem facing the Telecommunications Department is the shortage of skilled supervisory and technical staff. Twelve vacancies for Trainee Technicians have existed for four years but only two posts were filled by 1970. Increasing installations and resulting maintenance loads make it essential that suitable recruits are obtained to meet future requirements, otherwise there must be a deterioration in the service.

COMMUNICATIONS

(c) Press, Broadcasting, Information Services and Films **The Press**

There are three weekly newspapers in the State, viz: "The Borneo Bulletin", Brunei's oldest newspaper, reviews the news of the Borneo territories each week and has a circulation of 20,000 copies. It is published by the Brunei Press Limited in Kuala Belait and sells at 20 cents per copy. "Pelita Brunei" which is printed in Romanised Malay, is published gratis by the Department of Broadcasting and Information and issued to Government employees and to the general public. It is printed by the Star Press in Bandar Seri Begawan and appears on Wednesdays. "SALAM" which is published by the Brunei Shell Petroleum Company Limited, in three languages, Romanised Malay, Chinese and English, is the Company's own newspaper and appears on Saturdays.

Brunei's only daily newspaper, "The Star", ceased publication on 9th January, 1971 after the Brunei Press had taken over the paper and printing business; the latter continued as a subsidiary of the "Straits Times" group. The Brunei Press is still the Government Printer which publishes the Official Gazette and the Enactments fortnightly.

Broadcasting and Information Services

Broadcasting commenced in Brunei on 2nd May, 1957 and there was a separate Information office at that time; in 1962 both were amalgamated under a Director and have since functioned as one department, the official mouthpiece of the Government, to keep the public informed on vital issues and the news of the day. The department maintains reading rooms in five centres throughout the State which are used by thousands of people, young and old, of all racial groups who can read daily newspapers and magazines in their own languages. These reading rooms are situated in Bandar Seri Begawan, Tutong, Seria, Kuala Belait and Bangar in the Temburong District.

The department also maintains 16 mm. film units in Bandar Seri Begawan and Kuala Belait which are used to give film shows in the various kampongs and long-houses in the State as well as at schools and other institutions. In addition to screening films, the department has a small film production unit which produces news-reels and documentary films for local exhibition. During 1971 it produced five news-reels and several film records of important State functions and Royal ceremonies.

COMMUNICATIONS

The department also supplies public address systems to schools and colleges in the State and for other public events when required. Field officers of the department tour the various country districts and give talks and set up audio-visual displays on matters of public interest.

At the department's headquarters in Bandar Seri Begawan there is an airconditioned auditorium capable of seating nearly 600 persons where film and stage shows are held from time to time. There are now several local amateur dramatic groups who produce plays and other entertainments as well as concerts in this modern theatre.

Cinemas

There are eight commercially operated cinemas throughout the State located as follows: Bandar Seri Begawan (3), Tutong (1), Seria (2), Panaga (1) and Kuala Belait (1). Films are screened in Malay, Chinese, Hindi, English and Japanese with captions in another language to that of the sound-track. This is the main form of public entertainment in Brunei. Many clubs also have regular film shows using 16 mm. films rented from a commercial agency in Singapore.

Radio Brunei

Programmes are broadcast by Radio Brunei on four channels in the medium wave band and on two channels in the short wave band (61 and 41 metres) in Malay, Chinese and English for a total of 182 hours per week. The present transmission schedule for the medium wave services consists of two groups with a short-wave transmitter tied to each group. Thus the Malay programme service is broadcast on 242m, 273m and on 61.6m; the English service is heard on 399m, 335m and 41.6m. The English and Chinese services also share transmissions on 242m, 273m and 61.6m at different times with the Malay service. The English service and the Gurkha programme share 305m, 335m and 41.6m during the evening hours.

The popularity of Radio Brunei programmes is not restricted to the local audiences; listeners from outside the State reported their enjoyment of these programmes in all three languages. There is a one hour programme every evening in Gurkhali for the benefit of the Gurkha battalion stationed at Seria. This programme was supplied by the British Forces Broadcasting Service in Singapore.

COMMUNICATIONS

Listener Research

The analysis of listener mail which commenced in 1965 continues to provide much useful information about Radio Brunei's audiences in and out of the State. The monthly average of letters received by the three language services was as follows:—

Malay	Chinese	English	Total
1,852	634	1,635	4,121

It is difficult to assess the number of listeners in the State of Brunei because there is no radio licence in force. Estimates can only be made on the basis of the importation and sale of radios and by observation. The advent of the transistorised radio receiver with its low cost and cheap power supply has increased the number of listeners everywhere and Brunei is no exception. Using the import figures of radios as a basis, it is estimated that there are at least 15,000 receivers in the State. In order to help the inhabitants of the remote villages, the Government has subsidised the sale of transistor radios which are sold to approved applicants on a straight instalment-payment over 12 months. These sets become the property of the applicants on the first payment of the monthly instalment and the returns show a very small rate of default in payment. Many hundreds of sets have thus been put into use by the poorer sections of the population, particularly in the isolated communities of the "ulu" (forest) where dissemination of news and entertainment has been lacking.

Establishment

The department is headed by a Director and a Deputy Director while the technical responsibility of the department is borne by the Chief Engineer assisted by a competent local and expatriate staff. The present strength of the department is 165 persons, with 12 part-time staff and 18 daily paid workers. The operations of Radio Brunei are dispersed among the headquarters building in Bandar Seri Begawan, and the transmitting stations of Berakas and Tutong. There is a satellite transmitter at Kuala Belait to serve that part of the State but studio facilities there were closed down during the current year.

COMMUNICATIONS

Training

In October 1971, Grade II Technical Assistant, Awang Mirhassan bin Haji Abu Bakar, was sent to England to undergo a three year course at the Mid Essex Technical College, Chelmsford, Essex. Facilities are being made available at the new Electrical Trade School in Kuala Belait for technical staff of Government Departments to receive advanced training in electronics and allied subjects. It is hoped to send several of the department's technical assistants to take these courses next year.

Annual Budget

The 1971 budget of the Department was \$2,265,208.00 of which personal emoluments amounted to \$1,250,135.00, annual recurrent charges to \$645,480.00 and special expenditure to \$366,593.00. The amount provided for the Department in the Development Estimates for 1971 was \$150,000.00.

COMMUNICATIONS

(d) Land Transport

General

There has been a general increase in every field of land transportation in the year 1971 especially in cargo transportation due to various development projects in the State. The number of commercial vehicles on the road has increased by 20% over the previous year and in addition there was an increase of 12% in the Government fleet.

Although the weights of these vehicles have been limited to a gross tonnage of 9 tons for 2 axel and 12 tons for 3 axel vehicles but the frequency of the usage of such vehicles on the road cannot be controlled particularly when the State Development Projects are in full swing. The effect of this situation on the road is and has been alarming.

Registration and Licensing of Motor Vehicles

There is a sharp decrease in the number of motor cycles and scooters. This is probably due to the motoring public is beginning to realise the danger on the road in use of motor cycles and scooters. But in spite of this, the aggregate increase is still greater than that of 1970 by 191 units of motor vehicles.

No. of motor vehicles licensed on the road as on December 1971

	1970	1971	Increase
Passenger cars	10,252	12,055	+ 1,805
Motor cycles & motor scooters	1,599	1,308	— 291
Commercial vehicles	2,084	2,513	+ 429
Taxis	106	107	+ 1
Buses	115	139	+ 24
Government vehicles excluding military vehicles	945	1,064	+ 119
Total	15,101	17,186	+ 2,085

The number of motor vehicles registered in each month in 1971 is as follows:—

Year	J	F	M	A	M	J	J	A	S	O	N	D	Total
1970	235	213	198	219	177	227	212	237	201	209	189	179	2,496
1971	198	112	235	195	181	179	202	191	191	200	185	209	2,278

COMMUNICATIONS

The decrease in the total for 1971 as compared to that for 1970 are due to

- (a) There has been very much less registration of motor cycle as in the previous year.
- (b) There is hardly any increase in the rate of registration of trucks and heavy vehicles over the previous year.

Driving Licences

There were 19,208 licensed drivers in the State in 1971 and 8,938 learner drivers. Out of the above 4,028 learner drivers took up driving tests.

Revenue

The total amount of revenue collected in the year \$837,552.00 as compared to \$715,769.00 in 1970, an increase of 17%. This does not include the amount which could have been collected in respect of 1,064 licences issued to Government vehicles and 1,116 licences issued to Government Officers under the Exemption Order.

Miscellaneous

Vehicle Inspectors were called by the Police to inspect 714 cases of accidents during the year and the number of motor vehicles involved in those accidents was 1,011. From these cases the Vehicle Inspectors concerned attended as witnesses in 177 traffic cases in court.

Public Transport

The changes of the type of buses in various routes from 12 passengers mini buses to 30—40 passengers buses have proved to be very successful. The most gratifying result is that more passengers go in buses now than ever before and the fares had gone down tremendously especially on the Bandar Seri Begawan and Seria Route where the fare went down from \$4.00 to \$3.00.

Although the scheme has not been run fully as planned, however it is hoped that by 1972 a complete success could be achieved.

(ii) **Taxis** — There are 107 taxis on the road now, but as one development project is completed less usage of taxis is experienced. However the possibility of operators over-charging passengers also causes less people to use taxis. Operators have been advised therefore that any demand for higher fares would only cause less passengers and hence less earnings.

COMMUNICATIONS

(iii) **Good Service Vehicles** — In the past there has been no restriction in the issue of licences to good vehicles. This was done in order to help bring down the high rate of freight charges in the past. However the time has come when the State is over flooded with goods vehicles which causes very keen competition among operators. This has kept the rates very reasonably low.

The Motor Transport Licensing Authority felt that it was time then to plan the control of good service vehicles. Initially it is planned to separate and identify goods service vehicles from ordinary goods vehicles. It is hoped that by next year proper control of goods service vehicle could be affected in the State.

(e) Civil Aviation

The Department of Civil Aviation continued to carry out extensive training and recruitment of staff in preparation for the opening of the new international airport. Unfortunately, due to delays in construction the airport, which should have been completed this year, is now not expected to be ready for full operation till late 1972 or early 1973. Meantime the training of staff for air traffic control services, meteorological services and the airport fire services continued both in Brunei and by sending of personnel overseas for courses.

The existing airport continued to operate regular scheduled services by Malaysian Singapore Airlines F. 27 aircraft, i.e. daily passenger services connecting with the main centres in East Malaysia and freight services to Singapore. A number of non-scheduled flights by chartered companies used the airfield during the year as well as military aircraft, an aircraft from the Brunei Flying Club and other flying clubs in neighbouring territories.

Statistics indicating passenger and freight traffic for the year are as follows:—

Aircraft Movements

	Landings	Take-Offs
Civil	4,358	4,358
Military	1,246	1,243
	Embarked	Disembarked
Passengers	45,269	47,039
Mail (Kilos)	19,049	27,335
Freight (Kilos)	190,689	740,554

Climatological summary for 1971 is attached.

BRUNEI
CLIMATOLOGICAL SUMMARY YEAR 1971 **LONGITUDE: 114° 56' EAST**
BRUNEI AIRPORT **LATITUDE: 04° 55' NORTH**

HEIGHT OR STATION: 144 FEET
ABOVE MEAN SEA LEVEL

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Means or Extremes
Mean 0800 hour Air Pressure at Mean Sea Level (Millibars)	1008.9	1008.4	1010.7	1009.7	1009.2	1009.7	1009.2	1009.6	1009.9	1010.4	1010.3	1009.6	12,114.2	1009.5
Air Temperature In Degree Fahrenheit														
Mean of:														
A — Maximum	85.6	84.9	87.0	88.9	90.1	90.3	90.4	89.0	89.2	88.5	88.0	87.4	1,059.3	88.3
B — Minimum	74.8	73.2	73.0	73.0	73.8	73.8	72.5	72.7	73.2	73.7	73.0	73.1	879.8	73.3
Means of "A" and "B"	80.2	79.0	80.0	80.9	81.9	82.0	81.4	80.8	81.2	81.1	80.5	80.2	181.0	15.1
Means of Diurnal Variation "A" and "B"	12.9	11.7	13.6	15.8	16.4	16.5	17.9	16.2	16.0	14.8	15.0	14.2		
Absolute Extremes:														
Highest Maximum Date	88.1 18th	88.0 18th	91.8 14th	93.0 28th	93.2 1st	93.8 15th	93.9 12th	93.0 10th	92.9 28th	92.9 8th	90.2 28th	90.2 12th	1,107.0	91.8
Lowest Minimum Date	67.2 14th	70.3 21st	71.0 1st	69.3 27th	71.8 19th	69.2 9th	70.0 29th	69.3 28th	69.9 24th	70.9 2nd	71.4 9th	71.2 16th	841.5	70.1
Lowest Maximum Date	82.9 18th	78.1 10th	84.2 17th	84.0 10th	86.2 24th	85.0 28th	84.8 3rd	84.0 27th	84.0 24th	83.5 14th	83.7 24th	83.0 31st	1,003.4	83.6
Highest Minimum Date	76.7 22nd	75.1 5th	76.4 31st	77.2 3rd	76.8 23rd	76.1 3rd	75.6 17th	75.0 23rd	75.5 17th	75.8 29th	75.1 23rd	74.4 4th	909.7	76.8

BRUNEI
CLIMATOLOGICAL SUMMARY YEAR 1971 **LONGITUDE: 114° 56' EAST**
BRUNEI AIRPORT **LATITUDE: 04° 55' NORTH**

HEIGHT OR STATION: 14½ FEET
ABOVE MEAN SEA LEVEL

Rainfall	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Means or Extreme
Total (inches)	6.38	13.63	9.73	4.35	7.82	4.85	6.49	14.12	6.27	12.43	13.44	16.38	115.87	9.66
Duration (hours)	46.45	94.10	28.55	22.25	39.50	30.00	20.55	64.25	42.25	70.35	70.20	90.35	821.20	51.48
Number of wet days	17	22	15	13	19	15	13	19	20	19	21	23	216	18
Most in a day Date	1.54	3.17	4.62	2.42	1.47	1.44				3.61	4.42	3.22	33.00	2.75
Bright Sunshine	27th	25th	4th	20th	30th	14th	28th	17th	11th	31st	5th	31st	—	—
Total (hours)	172.55	144.10	191.10	238.00	248.70	196.65	239.05	221.20	199.65	180.60	168.50	179.05	2,339.15	164.93
Mean	5.57	4.09	6.16	7.93	8.02	6.56	7.71	6.81	6.65	5.83	5.62	5.78	77.97	6.13
Mean 0800 hour Relative Humidity	95	96	96	94	91	91	93	93	93	93	93	95	1119	93
Surface Wind														
Maximum Gust (knots)	26	26	28	19	32	38	32	32	26	33	26	36	352	29
Direction (Degrees)	010	220	210	360	330	230	210	160	230	200	210	220	Ver. 160° — 010°	
Date	22nd	17th	1st	12th	19th	14th	22nd	30th	11th	13th	9th	28th	—	—
Time (local)	1705	1240	1440	1625	1025	1530	1510	1350	1215	1450	1555	1306	Ver. 1025 — 1705	

APPENDIX "A"
The Rainfall Record For 1971

STATION	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Annual
(a) Brunei/Muara District													
Kilanas	6.03	14.14	6.57	2.95	10.24	5.57	3.86	13.79	6.87	10.68	12.72	13.07	106.49
Lumapas	7.65	20.09	3.68	2.43	8.77	4.33	3.37	10.39	10.04	8.80	10.36	13.46	103.37
Mulaut	6.54	13.94	7.20	2.59	7.94	5.20	3.59	18.48	8.19	11.03	13.29	19.36	117.35
Luahan	7.39	10.87	5.36	5.84	7.88	6.24	5.72	13.62	6.25	11.33	13.24	15.50	109.24
Kumbang Pasang	9.04	13.56	12.00	1.61	13.44	8.20	6.01	9.71	7.84	13.15	11.12	10.59	116.27
Semian Berakas	6.28	15.02	9.45	4.50	8.68	3.06	4.38	14.67	6.26	10.25	12.93	10.97	106.55
(b) Tutong District													
Birau	5.91	18.59	1.36	2.30	6.65	6.40	2.90	13.79	9.09	12.56	10.84	16.03	106.42
Pekan Tutong	7.55	12.63	3.16	1.91	3.97	5.38	3.19	16.65	6.21	11.07	8.12	19.81	99.65
(c) Belait District													
Mukim Labi	6.41	11.70	2.83	2.97	5.02	2.64	4.03	8.77	7.12	14.29	13.59	19.28	98.65
Sungai Liang	17.23	9.90	3.21	3.27	10.65	3.98	3.89	14.57	11.61	14.89	12.16	17.84	123.20
(d) Temburong District													
Labu Estate	14.44	25.69	9.42	6.51	13.43	6.54	6.61	22.87	20.63	18.10	17.19	19.90	181.33
Puni	7.98	12.70	10.25	4.45	4.99	5.59	5.60	12.06	10.35	9.68	11.71	15.58	110.94
Selangan	12.06	12.06	12.06	6.58	17.00	6.38	6.91	25.94	19.23	15.84	16.00	32.70	158.64

CHAPTER 11

WORKS, UTILITIES AND SUPPLIES

(a) Public Works and Utilities

Public Works — General

The increase in annual expenditure from \$36,000,000 in 1970 to \$39,000,000 in 1971 can be misleading in assessing the output of the Department, as a substantial element of this latter figure represents the major projects in hands of Consulting Engineers, and in which the Department's contribution was mainly of an administrative nature. In round figures a work programme of \$30,000,000 annually continues to be the utmost that can be expected from the Department's efforts, with staff and equipment as they are at present.

In future years, a sharp increase in Annually Recurrent Expenditure can be anticipated as the numerous technical services recently completed, or still in progress, including buildings, water supplies, roads and sewerage, become maintenance liabilities.

Out of the 20 Civil Engineering posts 13 are filled, three of them by graduates seconded to Consulting Engineers for training on large construction projects and consequently making no contribution to the Department's output. Of the five Architectural posts three are vacant, while vacancies also exist for one Chief Technical Assistant and eight Senior Technical Assistants. It is possibly not appreciated that very few indeed of these technical officers hold the qualifications and training which their appointments normally require.

It is anticipated that a number of graduate Engineers and Architects may be expected from their respective colleges in the near future, but the deficiency in more senior officers, mentioned above, raises problems over the professional training within the Department of these new recruits.

The manual labour force at the end of the year consisted of 1,370 daily rated and 804 monthly rated men, the latter being mainly skilled workmen in the categories of Tradesmen, Plant Operators, Drivers and the like.

WORKS, UTILITIES AND SUPPLIES

Difficulty was experienced in finding full employment for the large numbers of Earth-moving Plant Operators, who have worked for many years on Road Development Projects, having in the course of time gained much useful skill and experience in their duties, and who will be of great value when the next Road Development Programme materialises.

Site preparation, and incidental work associated with the new Airport, proved to be useful outlets for such men and their machines, but the problem is becoming increasingly acute.

While there was no general shortage of labour it was on occasion difficult to lay hands on an adequate number of men for arduous and unpleasant tasks, particularly from amongst employees in urban areas. The continued employment of the more highly skilled expatriate tradesmen, mainly for departmental workshops and machine shops, proved to be necessary, with no immediate prospect of their replacement by fully experienced locally born artisans.

The total personnel strength of the Department as on 31st December 1971, was:—

(a) Engineering & Professional	20
(b) Administrative and Clerical	109
(c) Technical	56
(d) Supervisory (Overseers, Mandores, etc.)	125
(e) Manual	2,174
Total	2,474

This compares with 2,575 in 1970 and 2,679 in 1969.

Contractors

The position regarding both the capacity of contractors and their system of operation remained largely unchanged, the number who contributed effectively towards the works programme of the Department representing only a small proportion of those registered. The necessity for a contractor to have a firm grounding in his particular trade, adequate workshops and other premises, and a sufficiency of plant and labour, is not fully appreciated. Many of the smaller firms obviously operated purely as middlemen with resources consisting of a little more than a post box number and possibly a vehicle.

WORKS, UTILITIES AND SUPPLIES

The better organised local contractors however played a substantial part in the large development projects assigned to firms of Architects and Engineers, indicating that as far as building work was concerned only the most extensive and complex schemes would be beyond their capacity, provided that they confined their activities to a single project.

Overseas contracting firms displayed less interest in work in Brunei and it would appear that a number of those to whom contracts were awarded had under-estimated the problems of logistics and expense arising locally, associated principally with the supply of materials and labour. A number of the large Malaysian/Singapore contractors who, when the current development programme was in progress, displayed interest and made tentative investigations into local prospects, decided ultimately to abstain from further participation. A particular problem arises in the execution of smaller civil engineering works, often of an urgent nature, and offering inadequate rewards to attract a better equipped contractor. The smaller firms to whom such work is normally awarded are frankly unsuitably equipped in either labour, plant, or knowledge, and progress is frequently disappointing.

Many of the smaller firms have not mastered the problem of pricing their tenders; and extraordinarily large variations between individual items and tenders frequently appeared, while arithmetical errors which should be obvious to an experienced eye, are a very common occurrence. Undue optimism over completion periods frequently arose.

During the year, 89 contractors were let, the largest being for a sum of \$680,000 for quarters at Berakas Camp. The number of registered contractors at the end of 1971 was as follows:—

Class A (Unlimited)	—	124	(122 in 1970)
Class AX (Up to \$500,000)	—	25	(20 in 1970)
Class B (Up to \$150,000)	—	84	(80 in 1970)
Class C (Up to \$25,000)	—	158	(151 in 1970)
Small Contractors (Up to \$3,000)	—	260	(259 in 1970)
Total	—	651	(632 in 1970)

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WORKS, UTILITIES AND SUPPLIES

Materials

Brunei continues to be almost wholly dependent upon imported manufactured materials for the class of work of interest to this Department. The position regarding supply from the Country's own resources remains unchanged from earlier years, although the prospect of supplies of good quality sandstone cobbles from the Temburong area for use in Government projects generally becomes firmer as the construction of pavements in the Temburong Road Project and the International Airport, for which this material is at present reserved, advances towards completion.

Otherwise, apart from bakau piles, bricks, beach sand, sandstone cobbles of a lower quality than those from Temburong, soft woods, and secondary hard-woods, development was wholly dependent upon imported materials and manufactured articles. In this respect some 40,000 tons of crushed granite were imported from Singapore for high quality road surfacing work, while a much smaller quantity of carefully selected granite from Hong Kong was used in high grade concrete work in water retaining structures constructed by Consulting Engineers.

Buildings

The Department is responsible for the maintenance of all Government buildings, apart from a few purely institutional premises of simple type, and with a few exceptions for all new building projects up to an individual value of about \$500,000. Above that figure, schemes are generally assigned to firms of Architects by the Commissioner of Development. Expenditure on maintenance of buildings was \$2.3 million and on new building projects \$5.7 million.

The largest Government housing scheme in the current development programme, with \$15,000,000 provided, for quarters in Bandar Seri Begawan, has now been completed with occupation of the final block of six units Senior Officers Flats at Jalan Malabau Bahru. Although a few individual building sites remain in the Jalan Berakas and Jalan Malabau Bahru areas any future housing development project will involve the location of a new site.

Similar housing projects have been completed in Kuala Belait while at Tutong the final phase of the local scheme is at present in progress.

The construction of rural Malay schools, to which a considerable amount of Departmental effort was directed in earlier years, came to a standstill pending directions from Government on the type of buildings to be adopted for these projects.

WORKS, UTILITIES AND SUPPLIES

Berakas Camp

As in previous years development work at the Camp entailed the provision of a separate construction group under a Civil Engineer. Apart from buildings and their services, the problems of erosion and soil conservation demanded constant and knowledgeable attention, and work on drainage, contouring, grassing and tree planting continued without interruption; in this relation the contribution by the Conservator of Forests in providing many thousands of seedling trees is gratefully acknowledged. It is believed that the most serious erosion problems have been dealt with and although progress may appear to be slow, the Camp now bears little relation to the alarming conditions which prevailed a few years ago. A small Departmental labour force, with earth-moving plant, is maintained on conservation work and site preparation, with major works let out to contract on plans prepared by the Department. The contracts which were handled included:—

(a)	44 units Married MOR Barracks	\$741,000 (Completed)
(b)	5 units Senior Officers Quarters	514,000 (Completed)
(c)	1 block NCO Flats	131,000 (Completed)
(d)	4 units Class "G" Quarters	129,000 (Completed)
(e)	Telephone Exchange Building	26,000 (Completed)
(f)	Hygiene Store and Office	35,000 (Completed)
(g)	Drainage works	281,000 (Completed)
(h)	6 blocks Single men Barracks	680,000 (In progress)
(i)	4 units Class "G" Quarters	120,000 (In progress)

Also completed was construction of the sub-structure for the R.B.M.R. aircraft hangar at Bandar Seri Begawan Airport, costing approximately \$70,000.

WORKS, UTILITIES AND SUPPLIES

Education-Buildings

A wide range of minor and miscellaneous works were carried out for the Education Department but the only major projects in progress were a few brought forward from 1970 or earlier:—

- | | | |
|-----|--|-----------------------|
| (a) | Malay School & Quarters, Danau | \$160,000 (completed) |
| (b) | 24 units Teachers' Flats, Seria | 442,000 (completed) |
| (c) | Malay School & Qtrs., Bukit Panggal | 180,000 (completed) |
| (d) | Malay School & Qtrs., Bengkurong | 221,000 (completed) |
| (e) | Malay School, Pulau Baru-Baru, Dewan, etc. | 64,000 (completed) |
| (f) | Malay School, Lumapas (contract determined on death of contractor) | 295,000 (in progress) |
| (g) | Temporary Classrooms, Anthony Abell College, Seria | 23,000 (in progress) |

Police-Buildings

Projects included in the 1971 Works Programme were:—

- | | | |
|-----|--|-----------------------|
| (a) | Barracks, Quarters and Ancillaries, Seria | \$180,000 (completed) |
| (b) | Dewan, Renovation of Police Station, etc, Seria | 139,000 (in progress) |
| (c) | Dewan and Ancillary Works, Kuala Belait Police Station | 67,000 (in progress) |
| (d) | Police Station, Barracks, etc. Sungai Liang | 200,000 (completed) |
| (e) | Class "B" & "E" Quarters, Gadong | 309,000 (in progress) |
| (f) | Police Station, Barracks, etc. Tutong | 347,000 (in progress) |
| (g) | Police Station, Barracks, etc. Muara | 475,000 (in progress) |
| (h) | Accommodation for Special Escort Section, Istana Daru Hana | 170,000 (completed) |
| (i) | M.R.U. Panaga, Preparation of Site | 196,000 (completed) |
| (j) | Police Posts at Puni, Puala Baru-Baru, Kampong Amo, Kampong Limau Manis, Kampong Lumapas and Batu Apoi were completed at a cost of about \$22,000 each. An assortment of minor buildings and other works were undertaken at Police Headquarters, Gadong. | |

WORKS, UTILITIES AND SUPPLIES

Miscellaneous Works and Buildings

The year's work included a large number of buildings and services in the region of \$10,000 to \$20,000, too many to mention individually, in addition to numerous alterations and additions to existing buildings. The larger projects which were undertaken were:—

(a)	Surgical Ward, General Hospital, Bandar Seri Begawan	\$110,000 (completed)
(b)	T.B. Centre, General Hospital, Bandar Seri Begawan	130,000 (completed)
(c)	6 units Senior Officers' Flat, Bandar Seri Begawan	400,000 (completed)
(d)	Agriculture Dept. Stores, Kilanas	26,000 (completed)
(e)	Class "E" & "F" Quarters and Barracks, Tutong	268,000 (in progress)
(f)	Immigration Post, Puni	23,000 (in progress)
(g)	Class "G" Quarters, Agriculture Department, Puni	33,000 (in progress)
(h)	Telephone Exchange, Kg. Manggis	27,000 (in progress)
(i)	Concrete Drains, Tutong	29,000 (in progress)
(j)	Concrete Drains, Kuala Belait	82,000 (in progress)
(k)	Barracks for Forestry Department, Andulau	42,000 (in progress)
(l)	Staff Barracks, Istana Daru Hana	404,000 (in progress)
(m)	Staff Barracks, Istana Edinburgh	55,000 (completed)
(n)	Re-roofing, Istana Edinburgh	100,000 (completed)

Land Reclamation and Drainage, Kuala Belait

Erosion of the beaches between Kuala Belait and Seria has become a matter of some concern and extraction of sand was confined to the months between May and September, during which accretion normally takes place. Although no records are held by this Department the activity on the beaches indicated that very much larger quantities of sand were being removed for private development than were taken for Government purposes. During the year only 20,000 cubic yards of sand were used for swamp filling of Government land for use on prospective building and road locations, and for the very much larger quantity of 70,000 cubic yards required for the M.R.U. site at Panaga, sources of material had to be found in the Sungai Anduan and Sungai Tali regions.

WORKS, UTILITIES AND SUPPLIES

Concurrently with the development of areas of swamp around Kuala Belait into building sites the necessity for drainage continued with concentration on major outfall drains into which the laterals from Government and private properties could be led. During 1971 a length of 1,900 feet of reinforced concrete outfall drain was completed along Jalan Setia Di-Raja at a cost of \$135,000.

Water Supply

General

Rainfall for the year at 107.61 inches followed the normal pattern against an annual average of 113 inches, although there was a marked concentration of 65.7 inches into the second half of the year, the heaviest monthly rainfall of 18.05 inches occurring in December. There was no complete failure of any of the various supplies and the rise and fall in Tasek Reservoir followed normal lines.

None of the public supplies however proved to be adequate as in all cases demand was in excess of production, and rationing with attendant difficulties and expense was in operation throughout the State. The operations involved in the control of water by rationing to specific hours have a marked effect upon the quality of the product reaching consumers, as repeated interruptions in supply resulted in sediment and discoloration from the mains and service reservoirs appearing more frequently than under normal circumstances.

Building development in both the private and Government sectors continued to result in heavy increases in demand, which could at the best only be partially met at the expense of the quantity supplied to other consumers.

In Bandar Seri Begawan 450 additional connections were made raising the total to 4,846, while in Kuala Belait and Seria the corresponding figures were 104 and 2,678 respectively.

Despite the absence of extreme drought the demand upon water supply by road tankers increased sharply as housing development continued along public roads and beyond limits of normal reticulation, and requirements could at the best only be partially met.

Demands upon the Water Branch for repairs to water mains damaged in the course of pipe laying for the new sewerage and water supply projects in the hands of Consulting Engineers and contractors continued to be heavy.

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The new Sungai Tutong Water Supply Scheme undertaken by Consulting Engineers continued to make obvious progress. Towards the end of the year however the rate of work declined and some anxiety was experienced regarding the Contractor's ability to maintain his operations. A number of large development projects of National importance, principally the new Airport at Berakas and the Deep Water Port at Muara, are dependent upon a supply of water from this project and its expeditious completion is a matter of the highest importance. In the meantime, work is proceeding on the reticulation to distribute water from the new Sungai Tutong Scheme into both urban and rural areas. In the latter it will permit the closure of a number of small improvised untreated supplies operated by both the P.W.D. and District Offices, which are unreliable in output and a potential health menace.

The new Sungai Belait Water Supply, intended to provide adequate quantities for Kuala Belait, Seria and the coastal area up to Sungai Liang, is progressing somewhat slowly with the pipe-laying contractor encountering difficulties over the supply of his requirements. This new project is planned to provide an initial quantity of three million gallons per day from a source at Kampong Badas with treatment works at Seria, and with potential to provide six million gallons per day when demand arises.

Bandar Seri Begawan Water Supply

The average daily output over the year rose slightly to 2.4 million gallons per day against 2.23 million in 1970, with a maximum of 2.92 m.g.d. Throughout the year rationing was maintained at a nominal seven hours daily in urban areas with some relaxation as reservoir levels rose and a certain amount of additional restriction as they fell. In the more remote areas covered by the supply it was however possible to provide water only on alternate days.

The temporary pumped supply from Sungai Kianggeh into Tasek Reservoir was kept in operation until the latter part of the year during which time it provides a welcome addition of about 0.5 million gallons per day. In mid-year the permanent Supplementary Pumping Scheme from Sungai Kianggeh was completed and provides a further additional supply of approximately one million gallons daily, with a potential of two million gallons daily.

Generally, the quality of output was good both in purity and clarity with occasional marked deterioration, particularly in the latter, owing to rationing operations and mains breakages caused by contractors excavating trenches for new services.

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Kuala Belait Supply

This supply is obtained in bulk from the Shell Company installation at Seria, and the limiting factor is the quantity which can be made available from that source, nominally 800,000 gallons daily. The water passes through the Shell purification plant and receives further chemical treatment before distribution from the P.W.D. pumping and storage installation.

As in Bandar Seri Begawan the commissioning of a number of large development projects, principally educational, and increased public demand, resulted in progressively more severe rationing. At the close of year the New Hospital and the Town Sewerage Scheme had not been commissioned but demands from these in 1972 appear to be inevitable and a hiatus between these demands arising and the completion of the new water supply can be expected.

Other Supplies

Tutong's dependence upon a very small impounding reservoir makes the supply unusually susceptible to weather conditions, while demands are increasing substantially from a number of large school projects, with the requirements of a district hospital becoming imminent. The supply problem will inevitably continue until completion of the Sungai Tutong Project and in the meantime all that could be done was to slightly raise the level of the reservoir by temporary stoplogs and to install a small auxiliary pumping plant to make use of ground water from seepages.

At Labi the construction of a treatment works with storage reservoir and mains was completed by Consulting Engineers, but failed to commence operations owing to breakdown of the deep well pumps, forming the source of the supply, which were installed several years ago and which were found to require complete replacement.

Authority was received from Government to appoint a firm of Consulting Engineers to design and construct a small supply for Bangar Town costing approximately \$1,000,000. Until this installation is commissioned there would appear to be possibilities of taking over, for public purposes, the temporary pumping and treatment plant provided by the Contractors for the Temburong Roads Project for their own premises. The present public supply is completely inadequate both in quality and quantity.

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Gas Supply — Kuala Belait/Seria

This commodity, which like water, is obtained in bulk from Shell Company and distributed through public mains shewed few developments during the year. Unlike water there is no shortage.

Consumption increased from 1,442,000 cubic feet per day to 1,570,000 with the addition of 71 new connections, raising the number of the latter to 2,531.

Road Projects

On 31st December 1971, the mileage of roads in Brunei maintained by the Public Works Department was as follows:—

Bituminous surface roads	—	230.71 miles
Water bound roads	—	17.05 miles
Earth and sand roads	—	39.14 miles
Total	—	286.90 miles

The equivalent total in 1970 was 280.63 miles.

These roads with the exception of the third class are of all-weather motorable category and are considered to be of a relatively high standard in relation to the volume of traffic carried, although none of them represent modern motorway construction. There are, in addition, in the State, many miles of dry-weather motorable bridle-paths maintained by District Offices with occasional assistance given by the P.W.D. in bridge construction and earth-moving work.

Towards the end of the year work was commenced on the rehabilitation of roads in Bandar Seri Begawan which had suffered severely from damage caused by sewer, and other service, trenches, the nature of the subsoil causing the damage to be more wide-spread than normally associated with such work. Outside the town limits the construction of large diameter water mains along side tables also necessitated extensive pavement reinstatement work.

A programme of re-surfacing the Bandar Seri Begawan/ Kuala Belait trunk road was commenced and some four miles were completed. The existing pavement is anything up to 15 years old and has performed creditably over that period showing a few signs of wear and tear until in recent years the density of traffic increased substantially.

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In addition to pavement deficiencies arising through this increased traffic it is also evident that attention will in the near future have to be given to improvements to roadside drainage, kerbs and foot paths. The absence of any suitable materials for providing inexpensive hard shoulders is resulting in extensive damage to grassed side tables, while heavy vehicles commonly park upon such verges as do exist and the substantial deterioration of their surfaces results in absence of space for pedestrians with the risk of accidents becoming increasingly greater.

A major section of the Temburong Roads Project, which totals some 40 miles, was completed by Consulting Engineers and Contractors working under the direction of the Commissioner of Development, and its hand-over to this Department for maintenance was commenced. Wherever possible local labourers formerly engaged upon the upkeep of the District Office's bridle-paths, and now redundant, were engaged for this work.

Nearly all the road projects in the hands of the P.W.D. were nearing completion with the volume of pavement and surfacing work becoming increasingly greater, while requirements for earth-moving were reduced to small proportions. The progress of individual projects has been:—

- (a) **Jalan Kota Batu — \$4,800,000 — 11½ miles** — With the construction of some four miles of stone pavement and hot-mix surface this project was completed, apart from fairly extensive requirements for drainage, side tables and turfing.
- (b) **Jalan Lumapas — \$1,665,500 — 5½ miles** — was completed and operated on a maintenance basis.
- (c) **Jalan Lamunin — \$3,000,000 — 10 miles** — The stone base course of the pavement has been laid throughout and hot-mix surfacing taken up to 8th mile, the final section being left incomplete to avoid heavy wear and tear from construction traffic engaged on other projects. This particular road has suffered extensively from damage caused by pipe-laying in the verges, much of which was however unavoidable.
- (d) **Muara Port Roads — \$1,639,000 — 3½ miles** — Completed, apart from side tables, turfing, and a certain amount of drainage.

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- (e) **Jalan Subok — \$665,000 — 2 miles** — Unfavourable weather conditions early in the year retarded progress on this road, particularly as a reasonable access had to be provided for local village traffic while construction was in progress. However $1\frac{1}{2}$ miles of formation have been built and pavement is in progress up to $1\frac{1}{4}$ miles.
- (f) **Widening Jalan Kumbang Pasang — \$49,000** — This project which provides 1,000 yards of 48 feet wide pavement from the present Airport junction towards Bandar Seri Begawan was completed apart from incidental work.
- (g) **Jalan Layong — \$1,750,000 — 3.85 miles** — Under unfavourable weather conditions which resulted in much of the working site being under flood water, work on this project was commenced in March as a matter of urgency to provide access from Lamunin to the Kampong Layong headworks of the new Sungai Tutong Water Supply Project. The road had initially been part of a complex assigned to Consulting Engineers, held in abeyance pending completion of land acquisition.

Progress was good, with three miles of formation constructed and one mile provided with water bound surface, until continuous wet weather set in towards the end of the year and working conditions became impracticable.

Kuala Belait/Seria Road

Work on the pavement continued throughout the year with $2\frac{1}{4}$ miles in progress. The road when completed will provide an alternative link between Seria and the commercial zone of Kuala Belait, relieving traffic on the existing road which follows residential areas.

Anduki/Kuala Belait Road — \$1,500,000 — 14 miles

The up-grading of this road (which was a few years ago taken over from Shell Company) by widening, kerbing and surfacing was completed, apart from one mile in Kuala Belait Town where sewerage operations have necessitated work being kept in abeyance; widening of this final section is now in progress.

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Sungai Liang/Labi Road — \$12,952,984 — 29 miles

Work carried out throughout the year consisted of five miles of formation between Bukit Puan and Labi on which three miles of soil/cement stabilised base course and one mile of hot-mix surfacing were laid. In addition, extensive work by contract on grass planting as a measure against erosion on the shoulders, banks and cuttings was in progress. Like a number of other road projects work on these has been completed by the necessity to make provision for traffic through the construction areas, and by the acceptance of traffic, including heavy timber haulage, over partially completed formations.

Miscellaneous Road Works

Projects undertaken during the year included:—

- (a) **Simpang Muara Resettlement Roads**
One mile of roadway was widened and surfaced and provided with hot-mix surface.
- (b) **Jalan Kampong Klanggeh — 0.82 mile**
All earth works and drainage works were completed and construction of a stone base course was well in hand.
- (c) **Jalan Residency**
1.05 miles were widened to 20 feet and re-surfaced as a matter of urgency in view of its potential use as a ceremonial route.
- (d) **Approach Road to Berakas Swimming Pool —**
completed.
- (e) **Detours for roundabout at New Airport Access Road —**
completed.
- (f) An assortment of access roads to navigational aid stations and earth-moving works connected with the new Airport project were completed.

Air Field

The Department maintains a small gang at the Brunei Airport with duties including the up-keep of drains and surrounds, and the approaches to the flight strip, in addition to patching of the runway and the renewal of runway markings. Towards the end of the year necessity arose for major patching adjacent to culverts crossing the runway, where substantial subsidence had taken place, but owing to the advent of completely unsuitable weather conditions combined with necessity to confine operations to hours of darkness where the runway was out of commission, only partial remedial measures could be applied.

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Road onstruction — Materials

Investigations continued into sources of base course material to replace the Berakas stone / sand matrix, used extensively and effectively in earlier years, the deposits of which are now exhausted. The use of stabilised soil, with cement as the stabilising medium, has been widely proven in Brunei, but is by no means inexpensive nor are suitable soils always readily available. In addition, the mix-in-place technique adopted locally raises limitations on the thickness of base which can be provided. Imported quarried and crushed rock is prohibitively expensive, but large scale use has been made of local materials, both in the form of sandstone cobbles blended with finer materials and the same cobbles after crushing. Extensive sections of roadway constructed by these methods are being kept under observation.

With a number of road projects simultaneously reaching base course stage the demand for stone rose sharply and 83,000 tons of locally produced cobbles were used against 54,000 tons in 1970, with the cost dropping from \$15.00 per ton to \$9.85 per ton. The use of imported granite chippings for high quality hot-mix surfacing continued and during the year a total of 38,000 tons were used against 20,000 tons in 1970, the price remaining constant at about \$26.00 per ton, c.i.f.

Berakas Depot

In addition to the stone crushing and hot-mix installation at the Depot an emulsified bitumen plant is operated, as well as a plant for production of reinforced concrete spun pipes up to 42 inches in diameter. The output from the Depot during the year was:—

Hot bitumen — 1,200 gallons (16,700 in 1970)

Emulsified bitumen — 32,750 gallons (28,500 in 1970)

Hot-mix — 40,900 tons (21,000 in 1970)

R.C. pipes — 4,000 lineal feet (4,600 in 1970)

Precast concrete products — 1,200 cubic feet (800 in 1970)

The arrangement with Shell Company for the supply of heated bitumen in bulk by road tankers from their depot at Muara simplified operation of the hot-mix plant, the cost of the material in addition being slightly below that for bitumen supplied in drums as formerly.

WORKS, UTILITIES AND SUPPLIES

Workshops

The Public Works Department operates major workshops at Bandar Seri Begawan and Kuala Belait fully equipped with machines and tools to undertake all classes of vehicles and plant repair and overhaul in addition to service depots for field maintenance of plant, at Berakas Camp, Temburong and Bukit Puan. The number of men employed in these workshops totalled 474 in Bandar Seri Begawan and 160 in Kuala Belait.

Although a few other departments have service depots for the upkeep of their mechanical plant (mainly transport), the P.W.D. workshops provide repair facilities for all Government holdings, in addition to routine servicing facilities for the majority of Government vehicles.

With the increasing interest taken by local business firms in haulage, earth-moving, and light mechanical repair works, it has become departmental policy to confine P.W.D. workshop facilities and plant purely to Government requirements and not to intrude into the private or commercial sector.

Until recently, construction plant unavoidably left unprotected in remote areas after dark has been immune from vandalism and pilfering experienced in other countries, but in recent months repeated instances have arisen of the thefts of easily removed components from these parked machines. Similar thefts have taken place in urban areas and so far the culprits have not been apprehended.

The two landing craft owned and operated by this Department have been on regular charter to Askar Melayu for the transport of troops and materials between Bandar Seri Begawan and Temburong, whilst similar services to Labuan have been provided for the local Gurkha Battalion. The vessels have also continued to make a useful contribution to the development effort of the country in handling heavy units of contractors' plant between Brunei/Labuan/Temburong. The revenue earned by these vessels during the year was \$80,000.

The repair works carried out during the year compared with those in 1970 consisted of:—

	1971	1970
Major repair	86	26
Minor repair	3,883	3,136
Other works	3,414	3,413
No. of vehicles serviced	2,151	3,366

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Difficulty in obtaining spare parts from local stocks of distributors of vehicles and plant is still encountered and increased resort was made to the supply of light items by airfreight from Singapore and Malaysia; the additional cost of this freight has been justified in avoiding extensive down-time of equipment under repair.

The rate of disposal of unserviceable plant and vehicles continued to be unsatisfactory with additional numbers accumulating at Berakas Depot where, unavoidably exposed to weather and petty pilfering, their value depreciated over the months or years lapsing between their withdrawal from service and actual offer for sale.

Plant and vehicles purchased and received during the year included:—

Heavy equipment	—	7 units
Light vehicles	—	5 units
Total	—	12 units

Plant and vehicles surveyed for write-off during the year were:—

Earth moving & road making plant	—	5 units
Heavy vehicles	—	22 units
Light vehicles	—	9 units
Total	—	36 units

Departmental holdings at the end of the year were:—

	1971	1970
Earth moving and road making plant	— 210 units	212 units
Heavy vehicles	— 230 units	248 units
Light vehicles	— 85 units	89 units

There are no training facilities for workshop employees within the Department but a number of men sent to training establishments elsewhere: these being:—

Two students to Government Engineering Trade School (Automobile Mechanical Section) Kuala Belait.

Six students to Marine Navigation School, Labuan, for master, mate, and engine driver certificates.

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(b) Survey

General

During the year under review the Department was kept fully employed in all sections, giving service to other Government departments, Government consultants and the general public.

A bulk store was constructed to enable bulk stocks of maps to be kept in Brunei. This store was very necessary because of the withdrawal of the Army Survey Depot from Singapore, where in the past bulk stocks were readily available.

A map exchange agreement was made between the Surveyor General and the Director of Military Survey U.K. This agreement enables the Department to obtain certain map series on a "free of charge" exchange basis.

Aerial photography was taken of selected areas of new development in the State which included the Muara Port area where the effect of littoral drift of sand needs frequent study.

The Surveyor General, Dato N. C. Peat and the District Surveyor, Belait, Awang Mohd. Taib bin Haji Said attended the Commonwealth Survey Officers Conference held at Cambridge, England. The District Surveyor also attended the Commonwealth Military Survey Conference in London representing the interests of the Royal Brunei Malay Regiment. He also visited survey organisations and instrument manufactures both in England and Europe during a two months study tour.

Field Surveys

The Survey of land for sub-division, road acquisition and Government Reservations progressed steadily throughout the year.

Five new tertiary triangulation stations were established in Temburong District, providing addition control for new traverses in the area, which was necessary for the road development. Great assistance was given by the use of the Royal Brunei Malay Regiment's helicopter, which transported the survey parties and beacons to the selected sites.

Two units of the Wild DI-10 Distomat were purchased during the year and were in operation on control traverses. These electronic distancers proved a great success both in accuracy and speed of operation. A line of 1000 metres can be measured in about 25 seconds at an accuracy of 1 to 2 cm.

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Survey Drafting

The laborious task of drafting of survey plans continued on the Cassini projection, but it is intended to redraw all the master plans and new plans on the Rectified Skew Orthomorphic projection next year.

Progress was made on the compilation and drawing of the "Location of Services" plans of Bandar Seri Begawan area.

All the Wayleave Agreement Plans for the 66 K.V. Electrical Transmission line were completed.

A small inexpensive plan typewriter, which enables lettering to be made on drawings and plans on a flat surface, was purchased. This machine produces excellent lettering quickly and has reduced the drafting time in preparing plans considerably. It is intended to purchase several more of these machines next year.

Mapping

The revision of the T 735 Series, 1/50,000 Scale maps on the new specification continued and the Bandar Seri Begawan sheet was received in bulk supply from the printers. Unfortunately this sheet was not available for the general use for security reasons. Tutong sheet was completed and forwarded to the printers, and the Tasek Merimbun sheet partially completed.

Map extracts of all new editions are being prepared for the Education Department, and two extracts have been completed and sent for printing.

A new Street Map of Bandar Seri Begawan and environs was printed and on sale to the general public. A similar map of Kuala Belait and Seria was partially completed and will be printed early next year.

Messrs. Survey Services of Singapore were commissioned to supply maps of Brunei-Muara District at a 1/12,500 Scale. The maps are required for development planning of the area. Aerial photography was flown and ground control completed and the finished maps in six colours will arrive in Brunei early 1972. A further survey was carried out by Messrs. Survey Services for the Agricultural Department's Station at Birau at a large scale.

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Survey Computing

It was necessary for additional staff to be employed on survey computations. The output was excellent considering only hand operating calculating machines were available. The need for modern electronic calculators and desk top computers still remains and with the increase in surveys the urgent demand for new sub-division of land will be considerably delayed. It is hoped that modern calculators will be made available next year.

Photographic Printing

This section was fully employed throughout the year providing photographic prints for both Government departments and public alike. On the graphic arts side, the reproduction of negative and positive film materials for mapping was considerable.

The photo-lettering machine purchased in 1970 was in full use. Besides composing for mapping, name plates and labels were made for other Government departments, in particular the Fisheries Department who required hundreds of labels for the fish tanks at the Hassanal Bolkiah Aquarium.

Progress for Year 1971

Drafting Section	Jobs Approved	
	1970	1971
Sub-division	165	191
Land Applications	3	1
Gazette Plans	26	28
Certified Plans	135	144
Dyeline and Reflex Printing	16,611 ft.	23,076 ft.
Photostat Printing	12,162 ft.	15,544 ft.

Computer Section

Job approved	238	270
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Field Section

Land Applications	2	7
Sub-divisions	219	213
Government Reserves	36	26
Revision	30	56
Control	13	3
Road Acquisition	39	41
Miscellaneous jobs	33	25

Revenue through

	1970	1971
Sub-division of land	= \$45,555	\$56,973
Map and Printing Sales	= \$18,906	\$13,864

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(c) Electrical Supplies

The load continued to grow at a high rate, maximum demand increasing from 11.1 to 14.3 MW during the year and units generated from 5 M in January 1971 to 6.9 M in December, 1971, making a total of 70 M for the year compared with 56.3 M in 1970.

Development of the transmission system included completion of the 33,000 volt line to give a combined supply to L.N.G., B.S.P. and Government Pumping Stations at Badas. The conductor used for the section of 66,000 volt line from Seria to Sungai Liang was replaced by new conductor of twice the capacity to accommodate the standby load to L.N.G. Lumut, the original conductor being recovered and used for the Badas line. L.N.G. Lumut was connected to the Government system by a short spur to the main line.

The B.S.P. and Government Power Stations at Seria are now interconnected at 33kV to give greater flexibility of operation in the area and for mutual benefit in emergencies. The original B.S.P. line to Badas has been taken over by Government who now control the pumping supply for the three stations. The system is operated to give maximum security of supply using two lines and two power sources.

There was some delay in the fourth Gas Turbine Generator at Seria due to last minute doubts about the load bearing capacity of the bridges between Kuala Belait and Seria. The two heavy lifts of over 65 tons each were, therefore, diverted to the Procon jetty at Lumut and then re-embarked on a flat-top barge to be beached at Seria. The movement was completed very smoothly by Procon staff.

Various shortages of small items further delayed completion, but the set should be ready to increase the system capacity by 16 MW early in 1972.

Rural electrification continued during the year. A total of 14 villages and kampongs were electrified as against seven villages in the previous year.

Total units generated during the year by the Department's power station rose to a record 69,903,958 units as against 56,309,846 during the preceeding year, an increase of 24.1%.

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Extension of the 11kV distributors continued as required and includes a four mile length of open line to supply the Tutong River Water Supply Headworks at Layong and extensions to 14 kampongs by the successful aerial cable system now preferred for this service.

Generation

As No. 4 set was not commissioned by the end of the year as expected, the capacity of Seria Power Station remained 30.75 MW. There were no major troubles, but at a routine maintenance of No. 3 set, it was found that an area of localised vibration, which was present at commissioning and which had been passed as acceptable by the manufacturers, has in fact caused unacceptable deterioration of the machine. This machine is now held as emergency reserve until the manufacturer can determine what remedial action is to be taken.

At Gadong Power Station, No. 5 set was put out of commission by accident due to maloperation of starting equipment. It has been found more expensive to purchase spares to repair the Ruston diesel than to buy a new engine and it is thought better to delay replacement of this unit until a large unit may be required, possibly powered by another type of fuel. Installed capacity is now reduced to 11 MW, but this is adequate for the present and the station continues to function satisfactorily. Table A below gives the installed capacity of each station at the close of the year, the total units generated and/or purchased and the maximum load recorded at each station during the year under review as compared against the previous year.

Table A

Station	Installed		Units generated		Max. Demand	
	Capacity in KW		and/or Purchased		in KW	
	1970	1971	1970	1971	1970	1971
B. Seri Begawan	14,000	11,000	1,753,820	4,273,280	—	—
Seria	30,750	30,750	53,654,600	64,734,000	11,100	14,300
K. Belait & Seria	—	—	140,009	175,218	—	—
Temburong	860	860	761,417	721,460	200	200

Transmission Lines and Substations

At the close of the year the following works were completed:-

(a) 66kV Transmission Line

1. a new T-off double circuit line for the L.N.G. works at Lumut, a distance of approximately 1 mile.

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2. Restranging of the double circuit transmission line between Seria and Sungai Liang sub-stations replacing the ACSR conductors from 0.15 sq. inches in copper equivalent to 0.30 sq. inches copper equivalent.

(b) 33kV Transmission Line

1. a new line from Seria Power Station to Badas, a distance of approximately 7 miles.
2. A single circuit tie-in between the B.S.P. and Government 33kV networks, a distance of approximately $\frac{3}{4}$ mile.

(c) Sub-stations

1. a new 33kV sub-station at Badas.

In the course of erection and expected to be completed early in the coming year were one 33kV sub-station at Seria and one 66kV sub-station at Lumut for the L.N.G. plant.

A landslide endangering the terminal tower at the 66kV Tutong Road, Mile 18, sub-station necessitated the deviation of the 66kV double circuit line, using two towers to replace the one endangered.

Also due to a landsilde a tower on the 66kV Lamunin line was replaced by the erection of two new towers.

Distribution

Major works completed or in course of construction.

- (a) The Lamunin to Layong line to supply the headworks of the new water supply was almost completed. Construction is on steel poles using 0.15 sq. in. A.C.S.R. conductor recovered from Seria/Sungai Liang 66kV. line.
- (b) An aerial cable was strung on steel poles from Rampayoh to Labi to give a supply to Labi water works and to the locality.
- (c) Aerial cable extensions to the existing system were made at Mile 13 and Mile 22 Tutong Road to supply Kampong Ketimahir and Kampong Luagan Dudok.
- (d) A line to supply Kampong Puni is in course of erection at Temburong.

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- (e) Other kampongs supplied in 1971 by aerial cable were Kampong Kulap and Kampong Dato Gandi.
- (f) The underground 11kV network in Kuala Belait was extended to include a 2,000 K.V.A. sub-station in the new Kuala Belait District Hospital.
- (g) Diviation of low tension lines was carried out on Jalan Muara and Jalan Tutong to make way for water pipe lines.

The following tables B, C and D give details of sub-stations erected and dismantled, underground cables laid and overhead lines erected and dismantled.

Table B — Sub-stations

District	Sub-stations Erected			Sub-stations Dismantled		
	No.	Type	Total Capacity in K.V.A.	No.	Type	Total Capacity in K.V.A.
Brunei and Muara	6	Standard	3600	1	Standard	150*
	2	Pocket Units	1250†	—	—	—
	4	Outdoor	1000	1	Outdoor	100
	8	Pole Mounted	40	—	—	—
K. Belait and	1	Outdoor	2000	—	—	—
Seria	3	Pole Mounted	90	—	—	—
Tutong	2	Pole Mounted	10	—	—	—

* Existing transformer uprated to 300 K.V.A.

† One unit of 500 K.V.A. installed at the L.N.G. Project Camp Site.

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Table C — Underground and Aerial Cables

District	Underground Cable Laid in Metres		H.T. Aerial Cable Strung in Metres
	H.T.	L.T.	
Brunei & Muara	8,424	15,860	5,850
K. Belait & Seria	720	11,500	2,150
Tutong	346	4,346	2,200
Temburong	150	400	—

Table D — Overhead Lines

District	Conductor Used in Metres Erected		Dismantled	
	H.T.	L.T.	H.T.	L.T.
Brunei & Muara	16,000	24,520	—	14,700
K. Belait & Seria	—	10,800	—	—
Tutong	—	3,080	—	—
Temburong	—	600	—	—

Consumers Section

During the year it was possible to reduce the number of meters to be read and the corresponding number of ledger entries, by grouping supplies. The concession of free electricity to Police and Army consumers has enabled bulk metering to be installed. The number of meters in Government Departments has been reduced by regrouping circuits in some cases. The number of new consumers is therefore not seen in the record of consumers on the books at the year end, which shows a decrease of 5,273 in the Brunei-Muara area.

Total sales of electricity amounted to 58,703,766 units. This is an increase of 10,669,434 or 22.2% over the year 1970 when total sales registered 48,034,332 units.

Table E below gives details of the units sold during the year under review as against the year 1970 and the number of consumers connected to the system as at 31st December, 1971, as against the number as at 31st December, 1970.

A system of charging deposits for consumers occupying rented quarters was introduced at the end of the year to simplify collection of accounts of outgoing tenants.

The Department maintained and kept in repair all installations in Government property, replacing the wiring where necessary when tests showed this to be due. New installations were all inspected and tested before being given a supply.

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A meter changing programme was put into effect so that calibrations may be checked regularly and condition of meters known.

Table E

District	Unit Sold		No. of Consumers as at 31st December	
	1970	1971	1970	1971
Brunei	36,663,403	39,705,599	12,807	7,089
K. Belait & Seria	8,922,426	15,857,346	2,566	2,751
Tutong	1,014,618	1,297,970	979	1,298
Temburong	517,738	505,399	207	233
Muara	916,147	1,337,452	228	240

Hire Purchase Scheme

The Department continued to operate the scheme throughout the year. A large number of applications for purchase of appliances under the scheme had to be held back due to lack of funds. It is hoped that the position will improve as more profits derived from the sale of appliances are accumulated along with the initial capital provided.

Details of the number of appliances sold under the scheme are given in the table below.

Table F

Appliances	Brunei including Tutong, Temburong and Muara		Kuala Belait and Seria	
	1970	1971	1970	1971
Refrigerators	358	583	230	309
Fans — Table, ceiling				
wall and floor stand	89	102	29	58
Washing machines	122	188	22	38
Cookers	121	96	1	—
Food Mixers	10	13	—	—
Air Conditioners	2	2	3	3
Vacuum Cleaners	—	1	—	—
Freezers	1	2	—	—
Electric Motor	—	1	—	—
Rice Cookers	5	4	—	3
Fry Pans	1	—	—	—
Sewing Machines	1	—	—	—
Ovens	8	10	—	—
Kettles	—	4	—	—
Blenders	—	2	—	—
Floor Polisher	—	1	—	—

WORKS, UTILITIES AND SUPPLIES

Air Conditioning Section

A total of 149 new window type air conditioning units of various sizes were installed in Government offices and buildings during the year as against 101 units in 1970. In addition, two air cooled central plants, one each at the new Museum and the Churchill Memorial complex, were installed and were functioning satisfactorily.

Regular servicing and maintenance of all air conditioning units were carried out by contractors under the supervision of the Department's Air Conditioning Engineer.

Street Lighting Section

Improvement of the street lighting system continued throughout the State though not at the same rate as in the preceeding year.

Sodium vapour street light fittings were tried out at some important road junctions in Bandar Seri Begawan and along one road in Tutong. More extensive use will be made of this type of road lighting in future due to its effectiveness and economy.

Details of street lights installed and commissioned during the year are as given in table below:—

District	No. of Lamps commissioned
Brunei and Muara	245
Kuala Belait and Seria	120
Tutong	31

Maintenance works and repairs were carried out and the whole street lighting system kept in good working order. Damage to traffic lights and lamp standars caused by accidents were dealt with promptly.

As in previous years, decorative illumination was provided at the Istana, Town Mosque, Government officers and Public buildings on all civil, ceremonial and religious occasions whenever the Department was called upon to do so.

WORKS, UTILITIES AND SUPPLIES

Stores

The organisation established at Gadong functioned smoothly and needs of the Department were covered by the normal indenting procedure and local purchase as required.

Staff

It has become increasingly difficult to recruit suitable staff and there are many vacancies in technical and supervisory grades. Some disappointments have been met in staff selected after interview, who have not signed contracts.

Existing staff have given good service and in many cases have had to extend themselves to cover the gaps.

The organization is close knit and carries out the whole range of electrical services in the State. Should there be any significant development in the number of consumers and the scale of operations it might not be possible to continue effectively to provide these services under present conditions.

WORKS, UTILITIES AND SUPPLIES

(d) State Stores and Supplies

The Department dealt with an ever increasing amount of business during the year under review. Both tonnage and value of stores showed a marked increase over the past years. More than 18,000 tons of materials made up of more than 296,000 packages were handled. The value of transactions totalled over \$19 million.

Purchases of stores amounted to \$9.5 and sales \$10 million. The value of stock holding at the end of the year was \$8 million.

Apart from the Motor Transport, Heavy Equipment and Plant Stores, General Engineering, Building Materials, Water Works Materials and Water Treatment Chemicals held by the department; Rice, Sugar, Milk were also carried as stockpile. These few items are given in greater details in the report.

Rice. This department continued to purchase rice from Thailand on a Government to Government Agreement. A new agreement was signed in March this year for the purchase of Class B 100% Thai White Rice which is also known commercially as grade "AAA" rice. The decision for the change over from the Class A rice which was bought during the past years to Class B rice was due to the rather significant price differential.

These two classes of rice belong to the same grade; only the composition of the sizes of grains differ. The gain through the lower purchase price paid for this class of rice was reflected in the retail selling price being reduced by an overall 30 cents per gantang during the year to \$2.20 in Bandar Seri Begawan.

8,500 tons rice with a total value of \$3,861,426 was bought and shipped on the m.v. "Cherry Bagus", a ship owned by The Soon Shipping & Tarding Co. Ltd. of Singapore. Seven sailings were made during the year. This firm has, however, decided to terminate its contract to carry rice for the Government because it did not find the Service between Bangkok and Brunei lucrative. The journeys were usually a one-way affair with sailings to Bangkok done on ballast. The contract will expire in March, 1972.

WORKS, UTILITIES AND SUPPLIES

Sales for the year amounted to 8,730 tons valued \$5,000,683. Stock held at the end of the year was 6,511 tons.

Sugar. A tender for the supply of 6,000 tons at \$451 per ton was accepted. Of this a quantity of 3,000 tons was delivered up to the end of the year. 4,000 tons from the previous year's tender were earlier delivered, thus making a total of 7,000 tons in all received for the year. The total value of purchase was \$3,166,209 and sales was \$2,387,800 for a quantity of 4,975 tons. Stock held at the end of the year was 3,324 tons.

Sugar was retailed at 34 cents per kati at Bandar Seri Begawan.

Milk. Both powder and sweetened condensed milk were held in stockpile. They were not sold directly to the market but the stock was rotated by exchanging for the fresh imports of the local agents. 43,568 cases milk were exchanged this way. However, due to the discovery that some of the sweetened condensed milk held in stockpile was deteriorating, the Government agreed and sold back to the Manufacturer 4,000 cases of this milk. A smaller stock is now carried for this item.

A small quantity of padi was also purchased from the Agricultural Department. 13,784 lbs. were bought and 5,494 lbs. were sold. Stock held at the end of the year was 89,600lbs. There was no padi being purchased from the local rice farmers.

The staffing position of the department improved considerably. Three storekeepers, Grade I, joined the Department during the year.

CHAPTER 12

A BRIEF HISTORY OF BRUNEI

Archeological works and the discovery of relics in Brunei and neighbouring Sarawak indicated that Brunei was an old established Malay State. This fact was supported by historical data, especially in reference to Chinese History, which showed that Brunei had a wide connection with her neighbours on the Asian continent around the sixth or seventh century A.D.

Chinese History dating 518, 523 and 616 A.D. related to the visits of envoys from Po-lo, Po-li, Pori, Ye-po-ti; a country of 45 sailing days from China. This coincided with the old location of Brunei.

Various names with many versions had been given to Brunei in the 19th century, Burni, Bourni, Bournee, Borney, Borne and Borneo were referred by the English before the 19th Century, and thereafter, it was commonly referred as Burne, Brunei, Bronei and Brunei. The Dutch on the other hand had given far-fetched names such as Berow, Barow, Barau, Beraw and the likes. Accordingly "Brunei" is perhaps a Sanskrit word meaning "Seaform". This presumption could be aptly accepted because the present proclamations of the titles in the Royal Court have shown Hindu influence brought about by Seri Wijaya.

Before the coming of Islam to this part of the world the history of Brunei was vaguely recorded and this made it difficult to determine ancient relics. The Majapahit Empire collapsed and in its place Malacca became the source of influence. It was around this time that Brunei became an Islamic State when Sultan Muhammad, the First Sultan of Brunei, embraced Islam on his marriage to a Princess of Johor.

The history of Brunei showed that Brunei played a major role in the propagation of Islam. In the 15th and 16th Centuries, Islam propagators from Brunei travelled to Celebes, Tidore and Ternate. This was also the beginning of Brunei expansion as a power in this region.

Following Brunei's territorial expansion, her relationship with Malacca and China was suspended and this remained so until Malacca fell to Portuguese in 1511. Brunei maintained her power and her independence from foreign influence until the end of the 19th century.

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Brunei was made famous and powerful by two Sultans. The first was Sultan Bolkiah, the 5th Islamic Sultan of Brunei and the son of Sultan Sulaiman. The second was Sultan Hassan, the 10th Islamic Ruler who was also known as "Al-Marhom Di-Tanjong", and even up to the present time his tomb is still located at Tanjong Chendana at the mouth of Brunei River. It was said that during the reign of Sultan Bolkiah the power and influence of Brunei extended to as far north as the Philippines. Sultan Bolkiah was known for his travelling and whenever he went, he took along his Royal Orchestra. Thus he was widely known as the "Nakhoda Ragam". From the chronological history of the Sultans of Brunei, it was Sultan Bolkiah who conquered Seludong (Manila) and later married the daughter of Dato Gamban, ruler of the territory. For a period of time Seludong had to pay an annual tribute to Brunei.

Sultan Hassan was the architect for the Pulau Chermin Fortress and the bridge connecting Tanjong Chendana and Pulau Chermin. During his reign elephants were introduced to add to the colour and splendour of the Royal Court. The Court was to become the Royal hereditary customs of today. These customs were similar in many ways to those found in Aceh. Many visitors from the West who came to Brunei during Sultan Hassan's reign had found that Brunei was producing brass cannons of much superior quality than any of those made in the Malay World. Several of these cannons were later brought along by visitors to Europe.

It was Sultan Hassan who was regarded as the most famous and powerful of all Brunei Islamic rulers. Brunei's jurisdiction covered the whole island of Borneo and the surroundings north of it. Sulu Island had to pay tribute and close family ties resulted between Brunei and Sulu. He married Princess Betara of Sulok and one of their sons, Pengiran Shahbandar Maharaja Laila was later to ascend as the ruler of Sulok Islands.

The influence of Brunei continued until the coming of the Europeans. Ludrico de Vartane, an Italian, was among the earliest visitors to Brunei in the years between 1505 and 1507 A.D. In 1516 Barbose, a Spaniard, visited Brunei and he was later followed by Anthony Pigafetta in 1521. The latter accounted that:

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"That city is entirely built in the salt water, the King's house and those of some of the Chieftains excepted. It contains 25,000 fires of families. The houses are all of wood, and stand on strong piles to keep them high from the ground. When the flood tides make, the women in boats, go through the city selling necessities. In front of the King's palace there is a rampart constructed of large bricks, with barbicans in the manner of a fortress, on which are mounted fifty-six brass and six long cannons. During the two days we passed in the city many of them were discharged. The King is a Moro (a) and his name Raja Siripada (b) he is forty years old and corpulent. No one serves him except women who are the daughters of chiefs. He never goes outside his palace, unless when he goes hunting, and no one is allowed to talk to him except through the speaking tube. He has scribes, called xiricoles (c) who wrote down his deed on very thin tree bark.

"On the 29th July, being Monday, we saw coming toward us more than a hundred praus, divided into three squadrons, and with them an equal number of Tungulis(?), which are their smallest barks. Seeing this and apprehensive of treasons, we anxiously make sail and in our haste left an anchor in the ground. Our suspicion increased when we observed that behind us, there are certain junchi (junks) which have come here the day before. Our first business was to disengage ourselves from the junks, and we open fire on them capturing four and killing many persons. Three or four junks run aground to save themselves. In one of those which we took we found the son of the King of the island of Loson (Luson), who was the captain-general of the King of Brunei, and who had come with the junks from the conquest of the great city of Laoe, situated at the end of that island opposite to Java Maggoire (probably some place in Banjar masin). He had made the expedition and snacked the city, because the inhabitants wishes to obey the King of Java in preference to the Moorish King of Brunei. The Moorish King having heard of our bad treatment of his junks, made haste to inform us through one of our people who was ashore trading, that the praus were no means intended to do us harm, but to make war on the gentiles, in proof of which they showed us some heads of those whom they had killed."

Some suggest the Pigafett's account is perhaps too much an exaggeration. Nevertheless, it is believed that at the beginning of the 16th century Brunei was a powerful kingdom and that during Pigafetta's visit, Brunei was under the rule of Sultan Abdul Kahar who was said to be about 40 years of age about the time of Pigafetta's visit.

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From 1530, European visitors to this part of the world kept on trying with great effort to hold power in Brunei in view of her being the centre of power in the Malay world. In 1577 A.D. the Spaniards, who were the occupying Philippines, paid a visit to Brunei with the intention of seeking permission to trade and to propagate Christianity. They also requested the Sultan of Brunei to forbid Bruneians from propagating Islam in the Philippines. Their request met negative response from the Sultan Saiful Rijal and in anger the Spaniards attacked Brunei early the following year with the help of two traitors, Pengiran Seri Lela and Pengiran Seri Ratna. In August 1578 the Spaniards occupied Brunei and the seat of Government was transferred to Ulu Mergang. The leadership was taken over by the Sultan's brother, Pengiran Bendahara Sakam who drove the Spaniards from Brunei. The Spaniards, however, renewed their attack in 1645 and was repulsed. Both the Portuguese and the Spaniards failed to secure any territory in Brunei.

Towards the later part of the 16th Century, the English and Dutch began to exert influence in southern Borneo and finally southern and eastern Borneo fell to the Dutch.

The British influence began in 1609, but it was not until 1701 that a trading post was set up in Bandjarmasin. In spite of this the British failed to gain power in Southern Borneo until the middle of the 18th Century.

In 1762 Sultan Aliuddin of Sulok, ceded Balambangan to the British, but in 1774 British activities there were temporarily suspended as their attention was diverted to the Malay Peninsula.

In the 19th Century, Borneo was turned into a field for power struggle among the British, Dutch, Portuguese and the American. Notable among the British were Brooke in Sarawak, Baron de Overbeck and Alfred Dent in Sabah. Brooke named himself "Rajah of Sarawak" and he remained in power by virtue of the 1841 Agreement with Brunei. Baron de Overbeck got himself the title of Maharaja of Sabah apart from being Raja of Java and Sandakan. The Dutch were successful in the southern part of Borneo, and by 1904, Brunei became a tiny country sandwiched between Sarawak and Sabah.

A Treaty was signed between Brunei and the British in 1847 for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra territorial jurisdiction over British subjects in Brunei. Provisions in this Agreement were modified in 1856 to clarify jurisdictions over British subjects for crimes committed in Brunei.

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In 1872, the Sultan of Sulok handed over all trading matters in Sabah to William Cowie, but conflict between the western powers led Alfred Dent to gain control and to establish the North Borneo Company in 1882. In 1888 North Borneo became a British protectorate and Brunei became a British protected State.

In 1906 Brunei accepted the First British Resident, a representative of the British Government, who was to advise on all matters except those concerning customs and religion.

Between 1906 and 1941 a new form of Government emerged to include a State Council. Oil was discovered in Seria and went into commercial production in 1929, but it was not actively developed because of economic recession in England and many parts of the world. Production was further interrupted by the war and did not fully resume until after the war.

During the second World War, the Japanese occupied Brunei for 3½ years.

After the war, the social and economic development of Brunei slowly returned to normal. However, dynamic progress was witnessed in the seventeen years Sultan Sir Omar Ali Saifuddin, the 28th Sultan of Brunei was on the throne. Under his initiative and leadership, Brunei progressed into the modern world in the economic, social and political fields.

Emphasis was laid on an extensive infrastructure for the State. Secondary schools were built in the towns and a network of Primary schools for the rural areas. A trunk road and branch roads were completed and social services were improved. A new form of Government materialized from the Brunei Constitution of 1959.

It was unfortunate that this aspired progress was marred and interrupted briefly by an irresponsible albeit abortive rebellion in December, 1962. Because of its lack of popularity, the rebellion was swiftly suppressed and it was not long before the State regained its normal pace of progress.

At the beginning of 1966 Brunei decided to introduce its own currency at the same time as Malaysia and Singapore in place of the Straits Dollar, which had previously been the common currency in all three States.

On 4th October, 1967 the Sultan of Brunei, His Highness Sir Omar Ali Saifuddin, after seventeen years of benevolent and progressive rule, on his own free will, abdicated and was succeeded by his son, the then Crown Prince. Under the Brunei tradition, the former His Highness became Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda Omar Ali Saifuddin.

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The new Sultan, the 29th of his line, took the name of His Highness Sultan Hassanal Bolkiah Mu'izzaddin Waddaulah. On the accession to the Throne, His Highness pledged to continue to work for the peace and prosperity of his subjects and the country, pioneered by his father, the former Sultan.

His Highness's Coronation took place in the new magnificent Lapau on August 1, 1968 and was attended by many foreign dignitaries.

Under His Highness's helmsmanship Brunei is devoting a share of its very considerable oil revenue to building up its economic and social infrastructure. The construction of the international airport (whose 12,500 foot runway will make it the largest in the Far East), the deep water port, the sewerage system, among others, are progressing rapidly to cater for the needs of a developing State. The first oil strike by Shell on its 1,470 square mile concession 22 miles off the Brunei coast will stimulate activity in more remote areas such as the Temburong District.

Prolonged negotiations on Brunei's constitutional future and on its relationship to the United Kingdom took place in London during September and October, 1968. The talks were attended, among others, by the new Sultan, his younger brother and his father, the former Sultan. Agreement in principle has been reached in 1970 over Britain's defence commitment to Brunei. On 23rd November, 1971, the Agreement was amended. In this amended Agreement Her Majesty continues to be responsible for the External Affairs of the State and that, subject to consultation, provision for the defence and security of the State should be a task to be shared between Her Majesty and His Highness, and that the State enjoys full internal self-government.

In 1970 Brunei has resurrected its rightful claim to the Limbang District, an area of approximately 1,000 square miles, which has grabbed by the Second Rajah in 1890, and now forms part of Sarawak's Fifth Division. The claim was made through proper channels seven years ago at the time Brunei refused to join Malaysia and this is the first time the claim has been made public. The public announcement was made by the Seri Begawan Sultan on September 29, 1970 and said "Brunei and Limbang are not separated because Limbang belongs to Brunei." he urged to topographers not to draw boundaries between Brunei and Limbang as the two were in one and the same territory.

On October 4, 1970 the State Capital, Brunei Town, was renamed Bandar Seri Begawan, to honour the Seri Begawan Sultan, Sir Muda Omar Ali Saifuddin, the Sultan's father. The official renaming ceremony took place on the town padang.

CHAPTER 13

CONSTITUTION AND ADMINISTRATION

The Brunei Constitution of September, 1959 cites Brunei as protected State in which the State's external affairs, defence and security are the responsibilities of the United Kingdom. Her Majesty the Queen's Government is represented by a High Commissioner to Brunei. The High Commissioner is to advise the State Government on all matters of the State except on other matters relating to the Muslim religion and the customs of the Malays as practised in the State.

Considering it appropriate that the existing close and special relationship between the United Kingdom and the State of Brunei, Darul-Salam, on 23rd November, 1971 the Agreement was amended so as to reflect developments that have taken place since 1959. In this new Agreement Her Majesty continues to be responsible for the external affairs of the State, and that, subject to consultation, provision for the defence and security of the State should be a task to be shared between Her Majesty and His Highness, and that the State enjoys full internal self-government.

The same Constitution provides His Highness the Sultan with supreme executive authority in the State. He is to be assisted and advised by five constituted councils; the Religious Council, the Privy Council, the Council of Ministers, the Legislative Council and the Council of Succession.

The Religious Council: In his capacity as the head of the Islamic Faith, the Sultan is advised in all Islamic matters by the Religious Council. Its members are appointed by the Sultan himself, and the Chairman or President is at present the State Religious Affairs Officer.

The Privy Council: The Sultan shall preside over this Council. The main function of the Council is to advise the Sultan in matters concerning the Royal prerogative of mercy, on the amendment or revocation of any of the provision of the Constitution, and on the appointments to Malay customary ranks, titles, honours and dignitaries. Its membership consists of the Regents (if a Council of Regency has been appointed), six ex-officio, the High Commissioner and any other persons as the Sultan may appoint.

CONSTITUTION AND ADMINISTRATION

The Council of Ministers: The Council of Ministers considers all the executive matters and those which are to be tabled at the Legislative Council meetings. It has eleven members, namely six ex-officio, the High Commissioner and four unofficial members who are also the appointed members of the Legislative Council. His Highness the Sultan shall preside over the Council.

The Legislative Council: This Council is presided over by a speaker appointed by the Sultan either from among the Members of the Council or from among persons who are not members. The Council introduces Bills, passes laws, exercises financial controls and scrutinises government policies and their implementations.

The Council of Succession: Subject to the Constitution of the State, this Council shall determine the succession to the Throne should the need arise. Its members are the "Cheterias", four "Mentris", all Malay members of the Executive Council and six members of the Religious Council.

Administration

The Mentri Besar is responsible to the Sultan for the exercise in the State of all Executive authority. He is assisted by three senior key officials, the State Secretary, the Attorney General and the State Financial Officer.

The State Secretary is the principal officer in charge of administrative affairs. The Attorney-General heads the Criminal Prosecution Department and the State Financial Officer is the principal officer responsible for the State financial matters.

Each individual department is headed by the respective head who must consult the State Secretary on any proposed departmental policies before implementing them. The four District Officers are also responsible to the State Secretary.

State Departments have their own branches in districts and these branches are responsible to their immediate departmental heads. In districts where there are no departmental branches then the respective District Officers will act as such.

Judiciary

The Judiciary is a sparate body and is responsible for the judical powers of His Highness the Sultan. His Highness may refer any question involving the meaning and interpretation of any the provisions of this constitution to the Interpretation Tribunal established accordingly.

CONSTITUTION AND ADMINISTRATION

The Public Service

The Public Service Commission provides the staff for all Government departments and other units of the administration except for the armed forces, the police force and the prison service for the State. The Commission consists of a Chairman and four other persons appointed by the Sultan. Members of the Commission are appointed for a period of three years and at the end of the period they are still eligible for reappointment.

Except in the exercise of the power conferred upon him, His Highness the Sultan shall consult and act in accordance with the recommendation of the Public Service Commission. The power to appoint, transfer, promote, dismiss or exercise disciplinary control over public officers is largely vested in His Highness. A special Provision is made for Overseas Officers.

List of Chief Ministers

September 1959/July 1961:

Yang Amat Berhormat, Pehin Datu Perdana Menteri Dato Seri Utama Awang Haji Ibrahim bin Mohd. Jahfar, D.K., S.P.M.B., D.S.N.B., C.B.E., P.O.A.S.

August 1961/May 1967:

Yang Amat Berhormat, Dato Seri Paduka Marsal bin Ma'un, S.P.M.B., D.S.N.B., P.O.A.S.

June 1967:

Yang Amat Berhormat, Pengiran Setia Negara Pengiran Haji Mohd. Yusuf bin Pengiran Haji Abdul Rahim, S.P.M.B., D.S.N.B., P.O.A.S.

Members of the Privy Council

Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Sir Muda Hassanah Bolkiah Mu'izzaddin Waddaulah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., D.P.K.G., D.P.K.T., P.S.P.N.B., P.S.N.B., P.S.L.J., S.P.M.B., P.A.N.B., G.C.M.G., D.K. (Kelantan), D.K. (Johor), Sultan dan Yang Di-Pertuan Negeri Brunei Darus Salam.

1. Yang Terutama Awang A.R. Adair, C.V.O., M.B.E., Pesuruhjaya Tinggi Duli Yang Maha Mulia Baginda Queen di-Brunei, Brunei.

CONSTITUTION AND ADMINISTRATION

2. Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin ibni Al-Marhum Sultan Muhammad Jamalul 'Alam, D.K., K.C.M.G., P.H.B.S., Brunei.
3. Yang Teramat Mulia Seri Paduka Duli Pengiran Perdana Wazir Sahibol Himmah Wal-Waqar, Pengiran Muda Mohamed Bolkiah ibni Duli Yang Teramat Mulia Paduka Seri Begawan Sultan Sir Muda 'Omar 'Ali Saifuddin, D.K., P.H.B.S., Brunei.
4. Yang Teramat Mulia Seri Paduka Duli Pengiran Bendahara Seri Maharaja Permai Suara, Pengiran Muda Haji Hashim ibni Al-Marhum Duli Pengiran Bendahara, Pengiran Anak 'Abdul Rahman, D.K., S.P.M.B., P.O.A.S., Brunei.
5. Yang Teramat Mulia Seri Paduka Duli Pengiran Di-Gadong Sahibol Mal, Pengiran Anak Haji Khamis ibni Al-Marhum Kebawah Duli Sultan Hashim, D.K., D.P.M.B., P.O.A.S., Brunei.
6. Yang Teramat Mulia Seri Paduka Duli Pengiran Pemancha Sahibol Rae' Walmashuarah, Pengiran Muda Haji Mohamed 'Alam ibni Al-Marhum Duli Pengiran Bendahara Pengiran Anak 'Abdul Rahman, D.K., S.P.M.B., D.S.N.B., O.B.E., P.O.A.S., P.H.B.S., Brunei.
7. Yang Teramat Mulia Seri Paduka Duli Pengiran Temenggong Sahibol Bahar, Pengiran Haji Mohamed bin Pengiran Piut, D.K., S.P.M.B., D.S.N.B., P.A.N.B., M.B.E., P.O.A.S., Brunei.
8. Yang Berhormat Pehin Orang Kaya Laila Setia Bakti Di-Raja, Dato Seri Utama Awang Isa bin Pehin Datu Perdana Menteri Awang Haji Ibrahim, D.K., S.P.M.B., D.S.N.B., O.B.E., P.H.B.S., Penasehat Umum Kebawah Duli Yang Maha Mulia Paduka Seri Baginda Sultan dan Yang Di-Pertuan Negeri Brunei, Brunei.
9. Yang Amat Mulia Pengiran Setia Negara, Pengiran Haji Mohd. Yusuf bin Pengiran Haji 'Abdul Rahim, D.K., S.P.M.B., D.S.N.B., C.B.E., P.O.A.S., P.H.B.S., Menti Besar, Brunei.
10. Yang Amat Mulia Pengiran Maharaja Anakda, Pengiran Haji Ahmad ibni Al-Marhum Duli Pengiran Bendahara Pengiran Anak Haji Mohd. Yassin, D.P.M.B., Brunei.
11. Yang Berhormat Pehin Orang Kaya Shahbandar Dato Setia Awang Haji Ahmad bin Daud, D.S.N.B., M.B.E., P.O.A.S., Brunei.

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12. Yang Amat Mulia Pengiran Paduka Tuan Sahibol Karib, Pengiran Haji Abu Bakar ibni Al-Marhum Duli Pengiran Pemancha Pengiran Anak Mohd. Saleh, D.S.N.B., P.O.A.S., Brunei.
13. Yang Amat Mulia Pengiran Jaya Negara, Pengiran Haji Abu Bakar bin Pengiran 'Umar, D.K., D.S.N.B., M.B.E., P.H.B.S., P.O.A.S., Brunei.
14. Yang Berhormat Pehin Jawatan Dalam Dato Setia Awang Haji Mohamed Noor bin Pehin Orang Kaya Laksamana Awang Haji 'Abdul Razak, D.S.N.B., P.O.A.S., Brunei.
15. Yang Berhormat Pehin Orang Kaya Amar Di-Raja, Dato Seri Utama Awang Haji Mohd. Jamil bin Pegawai Pehin Udana Khatib Awang Haji 'Umar, D.K., D.S.L.J., D.P.M.B., P.H.B.S., P.O.A.S., Brunei.
16. Yang Berhormat Pehin Orang Kaya Di-Gadong Dato Laila Utama Awang Haji Mohamed Yusof bin Pehin Jawatan Dalam Awang Haji Mohamed Hussein, D.K., P.S.N.B., D.P.M.B., P.O.A.S., Brunei.
17. Yang Berhormat Begawan Pehin Udana Khatib Dato Seri Paduka Awang Haji 'Umar bin Awang Rendah, S.P.M.B., D.S.N.B., P.H.B.S., Brunei.
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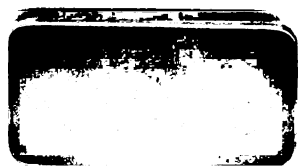


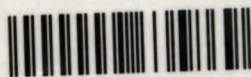
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